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Department of
Agriculture

Food Safety
and Inspection
Service

Meat and Poultry
Inspection
Operations

March 1987

MEAT AND POULTRY INSPECTION MANUAL

Reprinted with Changes
Third December 1985

PREFACE

The Meat and Poultry Inspection (MPI) Manual is an official publication of procedural guidelines and instructions to aid FSIS employees in enforcing laws and regulations related to Federal meat and poultry inspection.

This publication includes combined information from (1) Manual of Meat Inspection Procedures, (2) Poultry Inspector's Handbook, (3) Sanitation Handbook, (4) Approved Warehouse Requirements, (5) Beef Carcass Inspection Program, (6) Guidelines for Implementation of Sanitary Requirements in Poultry Establishments, and (7) various old MPI Bulletins. Most of these publications are now obsolete. Although this manual contains valuable information, it does not include specific information now present in regulations, directives, and other documents. Thus, it should be used in conjunction with all FSIS issuances.

In 1984, FSIS implemented a new Agency issuance system whereby all instructions to FSIS inspectors are in the form of either FSIS Notices or FSIS Directives. With this new system, the MPI Manual will be phased out over a three to five year period. Thus, this will be the final reprint of the manual.

Contained in this reprint, parts of the manual that have been rewritten into FSIS Directive format will reflect the specific issuance where that information may be found or, in some instances, it will be noted that the information is obsolete or in the regulations, etc. Because of time constraints and the volume of material involved, pen and ink changes were not incorporated in this reprint; therefore, those changes are included for 1979 through 1985 and must be completed by the user. As information was revised, removed, or added to the Manual over the years, such information was identified by asterisks and the numbers at the bottom lower left of the page indicate the year and the month those revisions, etc., were made.

The MPI Manual is still for sale and the publication "Issuances of the Meat and Poultry Inspection Program," which contains the FSIS Directives that replace parts of the manual, is also for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Original Manual	Printed	September	1973
Reprinted December 1979			
Final Reprint June 1987			

PEN AND INK CHANGES

1. Page v, line 1, change "Acceptable" to "Approved".
2. Page v, line 8, change "OIG" to "OI" and "Office of the Inspector General" to "Office of Investigation".
3. Page 85, Section 11.6(w), first column, line 11, change "Mecrotic" to "Necrotic".
4. Page 87, Section 11.11(o), first column, line 1, after the word "Scurf", add a comma and the word "interdigital".
5. Page 91, Chart 11.1, under "Reduced inspection", line 1, change "10" to "15".
6. Page 94, Table 11.8, under "Critical", "Major", and "Total", change to read from left to right: "1", "2", "4", "5", "12", and "13".
7. Page 96, Section 11.14(j)(2)2, first column, line 8, change the word "reject" to "accept".
8. Page 101 and 101a, delete Section 11.20(g).
9. Page 113, first column, correct the first word to read "assure".
0. Page 118, first column, delete the first three lines.
1. Page 142, Section 18.24(g)(2)c, first column, line 16, should read "drawn from these lots must be analyzed by".
2. Page 143, Section 18.29(f), first column, line 14, change "(d)" to "(e)".
3. Page 172, second column, last sentence, delete period after 18.18 and add the word "and".
4. Page 177, Section 18.70(a)2, second column, line 8, should read "Section 350.3(a)".
5. Page 180a, first column, line 10, should read "(c)" instead of "(b)".
6. Page 183a, first column, under (c), third sentence should read: "If a carcass shows a weight gain, each carcass being sprayed and chilled that day must be held until the carcass(es) in the sample for that day loses any gain it initially showed."
7. Page 207, delete Part 20.16, MP Form 455. Add "Reference Part 8.6, Sanitation Report".
8. Page 209, Chart 20.1, column 1, entry 4, change "MP 12" to "FSQS 1000.1".

2. Page 211, add the following information under headings, reading from left to right.

MP Form 450, Section 22.20(a), second column, delete the words "Issue MP Form 130" and add the following: "Certain products are subject to embargoes, from time to time. U.S. exporters are advised to obtain detailed information from their buyers before making shipments."	Est. & Prog. Off.	4 cys	Completed by FSIS upon request by est	See Form	See Form. Also, see Part 16. MPI Manual
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3. Page 212, Chart 20.1, MP 404, column 4, delete "weekly", and add "monthly". Under column 5, delete the information and add "DSC, MPI, 15, USDA, 218 Walnut Street, Room 791, Des Moines, IA 50309."
4. Page 214, Chart 20.1, MP Form 450-1, column 3, change the number of copies "1" to "1"
5. Page 215, Chart 20.1, MP 455, column 4, change to read, "Daily or as required", column 6, delete "N" and "U" and insert "N.O.", "AC.", or "D.L.".
6. Page 215, Chart 20.1, MP 490, column 1, subject form should read "MP 490, Development Record." Under column 5, delete the second line.
7. Page 215, Chart 20.1, MP 491, column 1, subject form should read "MP 491, Status Change Report". Under column 2, add "Maintain Status Data". Under column 5, delete "See form" and add "Reg. - copy, Area Office - copy".
8. Page 223, Section 22.20(a), second column, delete the words "Issue MP Form 130" and add the following: "Certain products are subject to embargoes, from time to time. U.S. exporters are advised to obtain detailed information from their buyers before making shipments."
9. Page 229, Section 22.22(b), second column, line 1, first sentence should read "Issue MP Form 130".
10. Page 237, Section 22.24(c)(4)(vi)6., second column, should read "Not an exception: Product may be exported without new weight figures, which will be added at the time of weighing and pricing in Canada. The words "net weight", "kg", "g", must be on the back at the time of export, however."
11. Page 244, Section 22.29(b)(4), second column, line 2, should read "Animal organs including organs from swine, intended for pharmaceu-".
12. Page 246, Section 22.31-A(a)(3)(g)4., line 7, should read "not exceed 61° F. at the carcass entry end and 40° F. at the carcass exit end."
13. Page 247, Section 22.35(a)(8)(ii), line 4, remove the second parenthesis from the word "bilingual".
14. Page 251, Section 22.38(c)(1)(i)6, should read "Trichinae treated pork tongues are eligible for shipment".

32. Page 251, Section 22.38(c)(1)(i), add a new number "8." to read "8. Livers. Hepatic lymph nodes must be attached and incised."
33. Page 252, Section 22.38(c)(iv), second column, add a new number "3." to read as follows: "3. The pork was treated to a minimum internal temperature of 149° F. for at least 10 minutes."
34. Page 254, Section 22.38(4)(i), the first two sentences should be combined to read: "Labels on bulk packages and shipping containers of meat, meat food products, and byproducts must be so placed that the label would be destroyed on package opening".
35. Page 260a, Section 22.39(a)(2)(i), first column, line 4 and 6, form number "131" should be changed to "150".
36. Page 260a, Section 22.39(a)(2)(ii), first column, line 9, form number "131" should be changed to "150".
37. Page 261, Section 22.40(b)(iii)(2)c, second column, line 3, change the word "It" to "If".
38. Page 261o, Section 22.66(a)(1), second column, include as the first sentence, "Importer must obtain permit from New Zealand Ministry of Agriculture".
39. Page 294, Section 27.17(e), second column, line 8, should read "in paragraph (c) above, will be".

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ABBREVIATIONS

AQC	Acceptable Quality Control
AQL	Acceptable Quality Level
MPI	Meat and Poultry Inspection
FMIA	Federal Meat Inspection Act
FO	Field Operations
FO-CS	Compliance Staff
FO-FP	Foreign Programs Staff
OIG	Office of the Inspector General
PPIA	Poultry Products Inspection Act
RD	Regional Director
STS	Scientific and Technical Services
STS-CH	Chemistry Staff
STS-DRS	Data Reporting Staff
STS-IC	Issuance Coordination Staff
STS-ISR	Inspection Standards and Regulation Staff
STS-LP	Labels and Packaging Staff
STS-MS	Microbiology Staff
STS-PFE	Plant Facilities and Equipment Staff
STS-PS	Products Standards Staff
STS-PTE	Pathology, Toxicology, and Epidemiology Staff
STS-RP	Residue Evaluation and Planning Staff
STS-SDS	Systems Development and Sanitation Staff
STS-SS	Scientific Services
STS-STA	Statistical Services Staff
STS-TS	Technical Services
STS-WS	Work Standards Staff
VS	Veterinary Services

PART 1

DEFINITIONS

DEFINITIONS

Subpart 1-A

(REGS: M-301; P-Subpart A)

1.1 LIVESTOCK

(a) Cattle

All bovine animals are included under the general heading "cattle."

(b) Low-Volume Plant

A plant slaughtering 1 to 15 animals in a workday.

(c) Downers

Animals unable to stand or showing abnormal locomotion.

(d) Slight

As applied to certain liver abnormalities (MR-311.31)--telangiectasis, sawdust, etc.--means lesions are small and few.

(e) Tuberculosis - Terms

A general guide to terms used for tuberculosis lesions is:

(1) Lymph node

Slight--normal-sized with more normal than diseased tissue.

Well marked--enlarged or if normal-sized has more diseased than normal tissue.

Extensive--greatly enlarged, or nearly all tissue affected.

(2) Other tissue

Extensive--more than half of the organ or tissue surface is affected (pleura or peritoneum included).

Multiple--lesions in more than one organ.

Acute, progressive--congested lesions surrounding tissue with edematous associated lymph nodes, or several small lesions around an older caseous focus.

1.2 POULTRY

Game Birds

Pigeons, pheasants, quail and migratory water fowl are excluded from the poultry definition stated in the regulations (PR-Subpart A).

1.3 LIVESTOCK

Direct Supervision

Applies to product under visual surveillance.

PART 3

EXEMPTIONS

EXEMPTIONS

Subpart 3-A

(Regs: M-303; P-Subpart C)

It is not amenable to the Federal Meat Inspection Act, but may be slaughtered under the reimburseable inspection program (Part 350 of the regulations).

3.1 GAME ANIMALS

(a) Buffalo, Reindeer, Elk

Area supervisors may permit slaughter of game animals--buffalo, reindeer and elk--provided adequate facilities are available and their handling does not create a health hazard.

Meat from such animals (including deer) is not inspected for wholesomeness, and cannot be used as an ingredient in meat food products. However, custom products--consisting of game meat mixed with pork, beef, or lamb meat--may be prepared for owners of game animals. Such products shall not be inspected and shall not be sold.

(b) Pigeons, Pheasants, Quail, Migratory Water Fowl

They may be slaughtered and processed at official plants, provided their handling does not interfere with inspection requirements, and products are kept adequately segregated. Labels of product not amenable to PPIA shall not bear the inspection mark unless the plant operates under voluntary inspection program.

3.2 CATALO OR CATTALO

This is a hybrid animal with bison appearance resulting from direct crossbreeding of bison and cattle.

3.3 BEEFALO

Beefalo are a breed of cattle (3/8 bison and 5/8 domestic cattle) recognized by the American Beefalo World Registry (ABWR), the national organization representing beefalo producers. These animals are amenable to the Federal Meat Inspection Act. The ABWR has established a Meat Registry program to register animals intended to be marketed for meat purposes. An animal presented for slaughter as a Beefalo must be accompanied by documentation that this animal is registered in ABWR's Meat Registry program. Products from such animals may be labeled as Beefalo beef. If such documentation is not provided, products from the animal are to be identified as beef. Control procedures for product bearing the label Beefalo Beef are contained in Section 17.13(n).

3.4 CUSTOM PRODUCT

(a) Identification; Separation

Field dressed game carcasses may be custom processed by official establishments in rooms where edible products are handled, provided they are kept separate and identified, and their handling does not hinder inspection.

3.5 RETAIL EXEMPTION AT OFFICIAL PLANT

Preparation of meat or meat products and slaughter and/or preparation of poultry and poultry products, for exclusive retail sale, may be exempt from inspection provided they:

1. Are conducted in separate facilities or rooms, or at a different time from operations requiring inspection. When conducted at a different time, a work schedule, signed by the owner or operator and outlining all retail activities and hours of operation, must be on file and available to MPI personnel.

2. Do not result in a nuisance or an insanitary condition to area(s) where operations require inspection, and all products prepared for retail sale are kept separate from inspected products.

* 3.6 EQUINES

* The Federal Meat Inspection Act,
* as amended, specifically exempts from
* inspection the custom slaughter and
* preparation of carcasses, parts there-
* of, meat and meat food products of
* cattle, sheep, swine, and goats
* delivered by the owner, exclusively
* for use in his household, by him and
* members of his household, employees
* and nonpaying guests.

* It should be noted that horses,
* mules, and other equines are not
* listed among those animals that may be
* slaughtered or processed for the owner
* on a custom basis. Therefore, the
* custom exempt slaughter and prepara-
* tion of carcasses, parts, meat and
* meat food products of such animals is
* not permissible.

The reverse of this page is intended to be blank.

PART 4

INSPECTION

DIRECTIVE 11,100.1 dated 2/11/86.)

PART 5

AND SUSPENSION OF INSPECTION
5-1

REFERENCE EMPLOYEE PERFORMANCE STANDARDS)

(REFERENCE MPI DIRECTIVE 915.1, REV. 3, dated 7/12/77.)

-B

FSQS DIRECTIVE 4735.4, dated 8/19/80.)

1000

1000

FSIS DIRECTIVE 8040.1, 9/23/83.)

1000 11 DUE TO CONDENSED MATERIAL, PAGES 4, 5, 6 and 7
WERE NO LONGER NEEDED: THEREFORE, PAGE 8 FOLLOWS:
THIS PAGE,

PART 6

ASSIGNMENT AND AUTHORITIES
OF
PROGRAM EMPLOYEES

ASSIGNMENT

Subpart 6-A

(Regs: M-306; P-Subpart F)

6.1 OPERATIONS AFFECTING INSPECTION

(REFERENCE EMPLOYEES PERFORMANCE
STANDARDS)

6.2 LOW VOLUME PLANT

(REFERENCE STAFFING STANDARDS AND
GUIDELINES)

6.3 ADVANCE NOTICE

(REFERENCE STAFFING STANDARDS AND
GUIDELINES)

6.4 WORK SCHEDULE

Plant management must, in advance and at least during the day preceding the change, notify the inspector in charge of any change in work schedule.

(a) Workday; Overtime

An inspector's workday begins when his service is required according to schedule. His workweek is that approved for the plant and consists of five 8-hour days consecutively, Monday

through Saturday (poultry), or Monday through Friday (meat). Any inspection service in excess of the plant schedule is overtime.

(b) Lunch Period

One lunch period--not less than 30 minutes and not more than 1 hour--is the only authorized interruption in the tour of duty once it begins. Such period shall not occur before 4 hours or later than 5 hours from starting time.

Exception. If a rest break of not less than 30 minutes is regularly observed at midpoint between start of work and lunch, lunch period may be scheduled as long as 5 1/2 hours after inspector's tour of duty begins.

When substantial overtime is required for a scheduled workday, a second lunch period should be provided. Lunch period (up to 1 hour) will not count as overtime.

If overtime will be short or if break will be less than 30 minutes, the inspector in charge should not officially recognize a second lunch break. He and inspector will remain in overtime status and the plant will be billed for such overtime.

6.5 "STANDBY" DUTY

When a plant does not operate on a day or part of a day during established workweek, the inspector shall be on "standby" or on approved leave for the established workday hours; therefore, he is in pay status. Even though he is on "standby" time, he

must report for duty at the plant each workday. As instructed by the inspector in charge, he may remain at his residence, if close enough for him to report for duty without delay.

If an inspector desires to leave the immediate vicinity, he shall request his supervisor for annual leave or leave without pay.

If an inspector leaves the immediate vicinity of a tour-of-duty station without approval, he is considered absent without leave.

Supervisor's Responsibility. When a plant is shut down, area supervisors shall take the following most appropriate actions:

1. Detail personnel to productive assignments within the area, if practical.
2. Upon request grant leave to involved inspectors.
3. Instruct supervisory personnel to hold training classes on regulations, instructions, inspection procedures, etc.
4. Place inspectors on standby time and, as required in sec. 5.2, inform RD.

When shut down is of extended time and area assignments are not available, involved inspectors should be detailed to areas where they can be properly utilized.

If it is known or anticipated that standby will exceed 5 working days, RD will immediately notify the Director of Personnel, APHIS, giving reasons for standby, number, grade, location and utilization of inspectors.

The area office will maintain a log of all reports of shutdowns.

Inspectors refusing to accept temporary detail to another location may be recommended for disciplinary action.

6.6 EMERGENCY INSPECTION (POULTRY)

(a) Plant

(1) **Inspector's absence.** When an inspector is absent for illness or other duties (checking of finished

product, etc.), cross-licensed graders may be utilized. As nonveterinary inspectors, such graders will inspect all birds, condemn those unfit for human food, and retain questionable ones for veterinary disposition.

Poultry inspectors or cross-licensed graders may operate eviscerating lines, provided adequate facilities are available for retained carcasses. When inspectors must leave eviscerating lines for other duties, graders may operate the lines for short periods, not to exceed a total of 2 hours daily. Graders will report directly to the inspector in charge when doing inspection work.

Qualified licensed graders should be available to perform grading duties when USDA graders do post-mortem inspection.

(2) **Veterinarian's absence.** In case of veterinarian's emergency absence, a qualified inspector or a cross-licensed grader may operate the eviscerating line until a relief veterinarian arrives. The inspector or grader shall: (1) try to determine the expected length of the veterinarian's absence and notify the area office by telephone as soon as possible; (2) retain and count questionable birds for veterinary disposition; (3) require refrigeration of retained birds held overnight or during the day when it is necessary to keep wholesomeness. Suitable retaining facilities with locking devices shall be provided.

A relief veterinarian shall be sent to the plant immediately unless the regular veterinarian returns to work the next shift.

(b) Circuit

When emergencies occur in several plants within a circuit, a veterinarian from a nearby plant should be called upon to help the veterinarian in charge. This can only be done

when a qualified inspector is available to relieve the veterinarian. Such inspector will assume all veterinarian's duties, except final disposition of questionable carcasses.

A trainee veterinary inspector may help the veterinarian in charge during emergencies to avoid calling on a veterinarian from a nearby plant.

6.7 SUPERVISORY VISITS

(REFERENCE PERFORMANCE STANDARDS)

(a) Visit record

(OBSOLETE)

(b) Odd-Hour Inspection

Inspectors in charge and circuit supervisors are responsible for inspection and all activities that might affect inspection in plants under their supervision.

Besides routine inspection, supervisory personnel shall visit official establishments at "other-than-normal" operating hours (odd hour) to observe sanitation, evidence of unauthorized operations, etc. Nonsupervisory employees may be utilized if authorized by circuit supervisors.

Seasonally operated plants need not be visited during inactivity; however, they should occasionally be checked for signs of unauthorized operations.

When possible, "odd-hour" inspections shall be done without overtime. Necessary overtime should be discussed with area supervisors. Form MP 4, Odd-Hour Inspection Report,

shall be completed for each inspection and shall be submitted as described on the form.

AUTHORITIES

Subpart 6-B

(Regs: M-306; P-Subpart F)

6.10 PLANT ADMISSION

(CONTAINED IN THE MPI REGULATIONS)

6.11 BADGE, ID CARD, KEY

While on duty, MPI employees assigned to processing, ante- and post-mortem inspection in meat plants shall wear a badge over the left breast of outer clothing. Other MPI employees shall have their USDA identification card.

Government keys issued to the inspector shall always be kept in his possession.

When badges, identification cards, or keys become unserviceable, are lost, or damaged, the inspector shall immediately report in writing through channels to the regional office.

6.12 AUTHORIZATION CARD

(REFERENCE FSIS DIRECTIVE 1000.2, dated 7/20/79.)

6.13 CONFIDENTIAL INFORMATION

All information on plant equipment, labels, procedures, and formulas must be handled confidentially and must not be discussed with persons other than plant management or MPI employee.

6.14 SAFETY

(REFERENCE EMPLOYEES PERFORMANCE STANDARDS)

6.15 STANDARDS OF CONDUCT

(REFERENCE FSIS DIRECTIVE 4735.3, dated 8/20/84, Amend. 1 dated 3/6/85.)

6.16 BRIBERY

(REFERENCE FSIS DIRECTIVE 4735.3, dated 8/20/84, Amend. 1 dated 3/6/85.)

6.17 APPEAL

When an inspector's decision is questioned, the circuit supervisor makes a report through the area supervisor to RD.

* 6.18 ACCUSATIONS

- * Information concerning accusations
- * by industry officials against inspection personnel will include for each incident:
 - * 1. A record of the complaint.
 - * 2. A written report by the official receiving the complaint, or other appropriate authority, resulting from a prompt review of the circumstances.
 - * 3. A record of the employee's expression of his views relative to the complaint.
 - * 4. A copy of the response to the official plant. A copy of this response will be given to the employee involved.
- * This does not apply to routine program appeals nor does it replace other reporting requirements.

* 6.19 FIREARMS

- * MPI employees have no authority to carry firearms while on official duties. As any State or local citizen, they are subject to prosecution for violation of State and local firearm laws and, in addition, they are subject to disciplinary actions imposed by the Agency.

PROCESSING INSPECTION; CATEGORIES

Subpart 6-C

(Regs: M-306, 303: P-Subpart C, F)

All processing operations require inspection. Required coverage is

determined by RD. Sanitation requirements are outlined in Part 8. Depending upon size and type of operations, processing inspection may be defined as normal, limited, and minimal

6.20 NORMAL INSPECTION

Operations are such that they may be conducted only when an inspector is on duty. Inspector's assignment may include one or more plants, or a large department.

Operations not identified in this subpart will receive normal inspection

6.21 LIMITED INSPECTION

(a) Visit Frequency

Unannounced, twice-a-week visits to plants and/or departments are required during designated production activities. This assignment may include coverage of several plants in large metropolitan areas.

(b) Operations

(1) Slicing, labeling, packaging. They are permitted if (1) they are designated by area supervisors as limited operations based on production or number of employees; (2) product is distinguishable, by appearance, from other products in the plant (franks with nonfat dry milk are not distinguishable from those without); (3) product is available for inspection before slicing, labeling, and packaging; (4) sliced, labeled, and packaged product is available for inspection before shipping.

(2) Pork cut, poultry cut-up. They are allowed, if (1) carcasses or parts are available for inspection before cutting; (2) operative sanitation is acceptable.

(3) Smoking, cooking, roasting. These operations may be allowed, provided plant's history shows temperatures continuously exceeding requirements, and label restrictions are not

determined by cooking or heating temperatures (turkey rolls).

(i) Product. The following products may be handled: comminuted sausage with pork heated to 140° F. or higher; smoked hams, loins, picnics, butts, and other smoked pork items labeled "fully cooked;" "watercooked hams;" "whole chicken and turkey carcasses;" "water and steamcooked poultry parts."

Pork or pork ingredient items removed from smokehouse or cooking chamber at 137° to 140° F. are excluded. Normal inspection is required for taking temperatures and for releasing such products, unless requirements described under minimal inspection are met.

(ii) Management's responsibility.

A designated plant employee will:

1. Keep a file of all temperature records or recording charts--identified by date, product, and piece number.

2. Inform the inspector at least 24 hours in advance of product to be cooked and/or smoked.

3. Hold smoked or cooked product until released by the inspector.

4. Satisfactorily present product or raw materials for inspection.

(iii) Inspector's responsibility

The inspector shall:

1. Once or twice a week (limited inspection), spot check processing times and temperatures, procedures, and operational sanitation.

2. Require establishment to weigh sufficient samples of products to verify proper shrink, if applicable.

3. Examine physical characteristics of finished product to verify adequate processing.

4. Temporarily check a process if apparent or suspected temperature violations have occurred (e.g., a change in processing procedure, equipment, or plant personnel).

(4) Rendering. Fats of all species may be rendered even though antioxidants are used, provided the establishment maintains all records and inventories on antioxidants, all raw fats are acceptably presented for inspection, and rendered fats are available for reinspection and/or laboratory sampling.

(5) Refining. Animal fats and oils may be refined, blended, hydrogenated, and deodorized, provided:

1. Products for processing are acceptably presented for inspection.

2. Sufficient finished product is available for random sampling.

3. Plant's compliance history is acceptable to RD.

4. Management maintains meaningful records showing raw product and finished product inventories.

(6) Grinding. Grinding that is incidental to cutting and wrapping of customer owned swine and beef carcasses or parts thereof is permitted if (1) operations are designated by the area supervisor as limited based on production or number of employees; (2) product is distinguishable by appearance from other product in the plant and is limited to fresh pork sausage, ground beef and/or hamburger prepared without additives except for permitted seasonings, spices, and flavorings; (3) only those source materials described above are used and they are available for inspection before grinding; (4) ground product is available for inspection before removal from the plant.

6.22 MINIMAL INSPECTION

Unannounced visits to plant(s) and/or department(s) are required at least every two weeks during designated production activities.

(a) Meat and Poultry Operations

- (1) Packing, shipping. Properly

marked meat and poultry products may be packed into shipping containers bearing marks of inspection and may be shipped.

(2) Canning-retorting, labeling. Canned product may be retorted, provided the inspector observes placing of cans in retorts, knows that steam pressure is applied, cans are properly coded, and labeled cans are available for inspection the following day.

(b) Meat Operations

(1) Carcass breaking. Breaking carcasses into primal parts is permitted, provided they are previously identified to the inspector.

(2) Bone digesting. The inspector must examine the product for wholesomeness before operation.

(3) Smoking, cooking, rendering.

(i) No label or temperature restrictions. These operations are allowed, provided: trichinae control restrictions are not applicable; label restrictions are not determined by cooking or smoking; products or raw materials are presented for inspection before operations; finished product is available for reinspection.

Products involved but not limited to these operations are: frankfurters, astrami, various loaves, scrapple, sili, lard, etc.

(ii) Label or temperature restrictions. Smoking and/or cooking operations for product requiring label: trichinae temperature control may be conducted, provided:

1. Sufficient thermocouples are used to measure product temperature in various places within the smokehouse.
2. One or more thermocouples are in the smokehouse to record its temperature.
3. Recording chart has military time print with intervals of 15 minutes to correlate time element with temperature readings.
4. Each thermocouple reading on the chart is clearly identifiable by number, color, or shape.

ber, color, or shape.

5. Chart is marked by each thermocouple at intervals not greater than once every 72 seconds. This should clearly identify variations due to opening doors and changing thermocouple location.

6. Door enclosing the recording chart has facilities for sealing with official seals.

7. Product's name, date, and smokehouse identification are shown on recording charts, retained by establishment, but available to the inspector.

8. Inspector is present to observe thermocouple insertion into or withdrawal from product. In cases where the inspector is not present to observe insertion into product, the plant shall designate to the IIC a person responsible for marking and initialling the starting time on the recording chart.

9. After smoking or cooking, product is held until released by the inspector.

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6.23 ASSIGNMENT

Minimal and limited inspection shall be done by assigned inspector; however, supervisors may perform additional "odd-hour" inspections.

Inspection intensity (for limited or minimal inspection) is as the one given to similar operations on normal assignment.

Limited or minimal coverage shall assure compliance with regulations, standards, and instructions.

Visits should be scheduled to prevent a definite pattern.

6.24 IMPROPER PROCEDURE: ACTION

When insanitary conditions or improper procedures are observed in a plant or department under limited or minimal inspection, they shall be corrected immediately and reported through supervisory channels to the regional office. The report will be kept on file and become evidence for possible inspection suspension.

PART 7

FACILITIES AND EQUIPMENT

FACILITIES

Part 7-A

Part 7-B, P-Subparts G, H)

Facilities must be safe, efficient, and kept sanitary.

Interpretation of layout methods for in "Agriculture". The inspector shall with the information.

Efficient ante-mortem pens for horses or other equine animals must have a height of at least 48 inches high, with safety railings of the pens.

PRODUCT FACILITIES

Equipment should assure efficient handling of condemned material.

Between edible and inedible products must be fitted with self-closing

air screens may substitute doors if approved by

(b) Chute, Conveyor

To prevent objectionable material from entering edible product department, chutes used for moving material from inedible to inedible product departments must be properly hooded and vented. Where other means are used to convey such materials, adequate measures must be taken to control odors.

7.3 LIGHTING

Adequate lighting must be provided to all areas where edible product is examined, processed, or stored, where equipment and utensils are cleaned, in dressing and restrooms, and in hand washing areas.

(a) Light Fixture

Light bulbs, fixtures, skylights, or other glass suspended over product shall be of safety type or otherwise protected to prevent product contamination if broken. A protective shield of suitable, nonshattering material (approved plastic) shall be used unless other equally effective protection can be demonstrated.

(b) Light Intensity; Meter

Lighting quantity should be determined by light meters. Adequacy is determined not only by intensity, but also by direction, contrast, and color.

(1) Meat plant. The following minimum light intensities shall be available before inspection.

Ante-mortem inspection areas 10-foot candles in pens, other areas where inspection is required.

performed. Meter readings taken at 3 feet above the floor.

Suspect pen--20-foot candles over entire suspect pen and restraint facilities. Meter readings taken at 3 feet above the floor.

Headwashing cabinet (cattle)--50-foot candles at level of head hook.

Head inspection (cattle):

1. Head rack--all areas of head illuminated to 50-foot candles down to symphysis of mandible;

2. Head chain--50-foot candles at lowest inspection point on hanging heads.

Head inspection (swine)--50-foot candles at level of mandibular lymph nodes on lowest hanging heads.

Viscera truck (cattle)--50-foot candles at lower pan.

Viscera inspection (all species)--50-foot candles on pan of moving top table.

Carcass inspection (all species)--50-foot candles at shoulders.

Final inspection (all species)--50-foot candles at shoulder level, viscera pan, and head rack.

Carcass cooler--10-foot candles at level of carcass front shank. This does not apply to hot carcass coolers unless they are also used as carcass holding coolers.

Offal coolers--20-foot candles at lowest level of open product storage; 50-foot candles at packing and reinspection areas.

(2) Poultry plant. Light intensities above those stated in the regulations are often needed to obtain good production rates.

To counter effect contrasted lighting, shielding may be desirable.

* * *

7.5 SEAFOOD FACILITIES

*

Areas where seafood is scaled, eviscerated, cleaned, etc., shall be separate from rooms where other edible product is prepared. Such areas must be approved and equipped with suitable sanitary equipment.

When edible seafood is processed, the operation must be separate from meat and poultry processing operations. As far as practicable, seafood processing should be conducted in separate areas using separate equipment. However, when equipment is used interchangeably, it must be thoroughly washed and sanitized after being used for seafood.

* 7.4 WAX FINISHING (POULTRY)

Facilities must be provided to prevent wax, used in dipping operations, from falling onto the floor. Wax that accidentally falls onto the floor shall not be reused.

EQUIPMENT

Subpart 7-B

(Regs: M-307; P-Subpart H)

Equipment used for preparing or storing product must be suitable for intended purpose. It must be of acceptable material and construction to be easily cleaned, and must not adulterate product, nor constitute hazard to the health and safety of inspectors.

7.9 ACCEPTANCE

- * The "Accepted Meat and Poultry
- * Equipment" booklet should be checked for equipment standards and acceptance procedures. When equipment is
- * brought into the plant, the inspector
- * should check this booklet to determine
- * whether the equipment has been
- * approved. If not approved, he should
- * reject it until approved by STS-PFE.

7.10 INSTALLATION

- Major pieces of equipment must be shown on approved blueprints before
- * installation is permitted. When equipment is installed on an experimental basis, drawings showing its location
 - * on floor plans must be submitted within 30 days after acceptance.

7.11 JET-VACUUM EQUIPMENT

Such equipment (used for cleaning jars or cans) must have safety devices to indicate malfunction of either jet or vacuum elements.

To control exhaust currents and to prevent dust and/or paper particles being blown back into cleaned containers, vents to the outside should be provided if necessary.

7.12 HOSE

Transparent plastic hoses may be used for conveying product if approved by STS-PFE. Rubber hoses or rubber-lined hoses are acceptable for water and steam lines where breakdown and cleaning are not required. They are not acceptable for recirculating water used on product or processing equipment.

7.13 PICKLE LINE

All pickle lines should be made of stainless steel or approved plastic. Those carrying salvaged pickle must be demountable for cleaning.

7.14 SMOKEHOUSE, OVEN

Smokemaking equipment and ducts in smokehouses and ovens must be designed for easy cleaning of all inner and outer surfaces.

7.15 CLEAN-IN-PLACE (CIP) SYSTEM

Sanitation procedures for CIP systems must be as effective as those for cleaning and sanitizing disassembled equipment. To remove all organic and inorganic residues, CIP system must meet the following criteria:

- a. Cleaning and sanitizing solutions and rinse water must contact all interior surfaces of the system.
- b. The system must be self-draining with no low or sagging areas.
- c. Pipe interiors must be highly polished (120-180 grit) stainless steel* for easy inspection.
- d. Easily removable elbows at each change of direction to provide an access for inspection.
- e. Any part not included in CIP system must be dismantled and manually cleaned.
- f. All sections of the system, including overhead lines, must be available for inspection without safety hazard to inspectors.
- g. Effectiveness of CIP system

must be evaluated by periodic dismantling for inspection of its interior surfaces.

(a) Accessibility

All equipment parts must be readily accessible for cleaning and inspecting. In large equipment, appropriately located stairways, catwalks, or other suitable provisions must be made to insure that all parts can be safely and efficiently cleaned and inspected.

(b) Pump; Pipeline

Pumps, pipes, conductors, valves, and fittings, used in connection with edible product (including pickle or vinegar solutions), should be of 300 Series stainless steel or approved plastic. High impact resistant glass pipelines may be approved on an individual basis by STS-PFE.

Pumps and pipelines conveying product must be easy to dismantle for cleaning and must not have dead space where product may stagnate. These requirements apply to lines used to convey raw fat and to recirculate rendered fats used in cooking and frying operations. Black iron pipelines with threaded or welded joints are acceptable for conveying rendered fats.

Continuous rendering is not considered complete until after the final centrifuge.

(c) Screen, Strainer, Filter

Screening and straining devices shall be readily removable for cleaning and inspecting and shall be designed to prevent wrong installation. Permanent screening and straining surfaces should be of rust-resistant metal. Filter paper shall be of single-service type. Filter cloths shall be washable.

7.16 OZONE

(a) Use

Ozone producing equipment may be used only in coolers set aside for

aging meat.

The ozone concentration in the air--as measured and recorded by proper devices--shall not exceed .1 ppm. Before inspections are performed, ozone generating equipment must be shut off and the ozone permitted to dissipate.

(b) Ultraviolet Lamp

Lamps producing ozone are restricted for use as outlined above. Those not producing ozone may be used in any area, provided:

1. They are shielded to prevent exposure of inspectors to direct or reflective ultraviolet rays; or
2. Rooms where unshielded units are used have light switches at entry points so the units may be turned off before inspectors enter. Such switches shall be identified by suitable placards such as "Ultraviolet Lights."

Inspectors shall not enter areas where unshielded ultraviolet lights are burning because of possible damage to skin and eyes.

STS-PFE will publish approved non-ozone producing ultraviolet lamps in the "equipment list."

7.17 HEAT EXCHANGERS

They may be used to heat or chill product, or gases or liquids that may contact product. Their use must not result in product contamination.

Inspectors should be alert to:

- a. Exchange media containing toxic components. Only chemicals approved by STS-SS shall be used. Common materials--brine, ammonia, etc.--need not be submitted for approval.
- b. Contamination of product by color, odor, or taste.
- c. Pinholes, hairline cracks, loose fittings, or other defects that could permit leakage into product.
- d. Evidence of leakage such as need to replenish supply of heat exchange medium.

7.20 WASH TABLE

or flight top table shall be flushed on each side of the product container. The product container will be subjected to high pressure in the sanitizing compartment. Number, location, and type of spray heads can best be determined by test results. If more cold water is needed to flush the product, they should be placed in the sanitizing compartment. The table shall be free of blood, fat, manure, and other material on the water surface of the table. If corrective action is not taken, the table is not adequate. Inefficient pressure, inadequate spray heads, low water temperature, not enough spray heads to cover the surface, or improperly directed or broken spray heads are common defects. Cooked blood and juices are common. The table is not adequately flushed with cold water before entering the sanitizing compartment.

7.21 COMPRESSED AIR

During operations when compressed air comes in contact with product and/or equipment, such air shall be filtered before entering a compressor; and be free from moisture, oil, or foreign matter. Compressed air storage tanks must have a drain. Water and oil traps must be between storage tank and point of use. Spent air must be exhausted preventing product contamination. All contacting product must be filtered as near the air outlet as feasible. Filter must be capable of withstanding 50-micron particles and must be readily removable for cartridge replacement or cleaning. Air intake and rotators shall also be filtered.

7.22 PRODUCT RECONDITIONING EQUIPMENT (MEAT)

Where product may accidentally become soiled, a separate, conveniently

located and properly equipped wash table—with sprays, removable and perforated plate to hold product off the bottom, etc. shall be provided. Such table should be identified as a "product wash table" and it should not be used for hand or implement washing.

7.21 ELECTRIC CORDS

The acceptance of electric cords should be viewed from a utility and safety aspect. Drop cords, free the ceiling, whether retractable or suspended, used to connect portable equipment are acceptable. Cords strung across the floor or serving as temporary connections are not acceptable.

7.22 ELECTRIC INSECT TRAPS

They may be used in edible product handling or storage areas provided they:

- Are of acceptable construction.
- Have protective grille to prevent electric shock.
- Have suitable bait or device to remove trapped insects.
- Trap all dead insects so that insects do not stick to the grille and create an odor, nor are they used as bait for flies.

7.23 INEDIBLE PRODUCT EQUIPMENT (a) Containers

They must be watertight, free of rust and corrosion, disinfected, marked with uniform identification, and acceptably clean before entry into edible product department.

(b) Tanks, Trucks (Poultry)

Watertight, covered metal tanks, trucks, or trucks may be used for holding inedible poultry products. They may be placed in an inedible product room, or outside the building, paved, drained, and conveniently located for cleanup, provided with hose connections for

PART 8
SANITATION

SANITATION INSPECTION

Subpart 8-A

(Regs: M-308; P-Subpart II)

Buildings, rooms, equipment, or other facilities shall be sanitarly maintained and in good repair.

8.1 MANAGEMENT'S RESPONSIBILITY

Plant management is responsible for producing wholesome products in a clean plant, utilizing hygienic procedures.

(a) Agreement

When inspection is granted, a responsible plant official signs a statement agreeing to strictly conform to all Federal regulations and orders pertaining to inspection. He actually guarantees that the plant will be maintained in sanitary conditions.

(b) Training

Plant management is responsible for training plant employees in proper handling of product and other sanitary procedures.

8.2 PREOPERATIVE INSPECTION

(a) Inspection by Plant Employee

In each plant or department a competent individual shall be responsible for the sanitation program. He shall inspect the plant or department before operations to insure that a

satisfactory cleanup was done and shall allow operations to begin only when all sanitation requirements are attained.

(b) Inspection by MPI Employee

The inspector shall conduct preoperative sanitation inspection of premises, facilities, equipment, and utensils to determine cleanup acceptability. He should especially examine product contact zones, and equipment difficult to clean or more likely to be poorly cleaned.

Individual utensils or items such as buckets, pans, trucks, etc., should be carefully inspected by examining a representative number of individual pieces. All items should be accepted or rejected on this basis.

Dismantled equipment, including pipelines, shall not be reassembled until inspected and passed. However, if the inspector is not available, it may be reassembled, in time to begin production, at the time stated in the advance notice of production hours (sec. 6.3).

Preoperative sanitation inspection may be made by one or more inspectors depending upon plant's size and complexity, and effectiveness of its routine cleanup program.

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shall assure that management assume their responsibility and that new plants be fully covered until a cooperative sanitation program is established.

inspection activities, but is a tool for documenting any sanitation deficiency that requires the inspector's time to obtain correction.

(1) CIRCUIT SUPERVISOR'S (CS) RESPONSIBILITIES

REGIONAL INSPECTION

The sanitation inspection is the responsibility of the inspector to observe and report on the following and general housekeeping procedures, equipment, handwashing, floor cleaning, removal, control of objectionable practices, bone removal, etc.

The inspector is responsible for identifying potential problems and recommending corrective actions.

(i) Follow guidelines in this section to assure uniform use of the MP Form 455, recognizing that flexibility is necessary because of differences in assignments.

(ii) Evaluate the circumstances within the circuit to determine the most productive application of the MP Form 455.

(iii) Submit supplemental instructions or variances from these instructions through channels to the regional office for approval.

(iv) Delegate, by assignment, inspector responsibility for making entries on the MP Form 455.

(v) Review a number of MP Form 455's in each establishment for conformance with instructions.

INSPECTION PRIORITIES

The primary objective of sanitation inspection is to prevent product contamination. The inspector must consider the types of contamination, and must establish priorities for initiating action.

INSANITARY CONDITION

Employees must use sound judgment in correcting insanitary conditions. They are responsible for ensuring all sanitary requirements are authorized to take appropriate action to meet such responsibilities.

(2) INSPECTOR IN-CHARGE'S (IC) RESPONSIBILITIES:

(i) Record entries as instructed.

(ii) Review inspection entries for conformance with the instructions.

(iii) In large complex plants, determine if it is more efficient for each inspector in an assignment to make out a separate MP Form 455.

(3) ASSIGNED INSPECTOR'S RESPONSIBILITY

(i) Complete at least one form for each plant on the day the plant activities are inspected. If one form will not accommodate all the deficiencies for that day, use additional forms or blank paper with a carbon copy for page two and subsequent pages. Number each page in the lower right-hand corner.

THE SANITATION REPORT

The documentation on the MP Form 455 is an important part of the sanitation program. The timely completion of this report serves as an important means of communicating with management to stimulate compliance with sanitation standards, and to provide a sanitation history in the plant. Properly completed MP Form 455's are a valuable document. This form does not indicate the frequency or location of

* (b) Completion of MP Form 455

* If applicable and in accordance
 * with the items listed under the
 * "GENERAL AREA" heading, complete
 * each column on the MP Form-455 as
 * follows:

* (1) "PRE-OP" and "OPER". Enter
 * the following information:

* (i) N.O. when for specific reasons
 * such as time, unusual problems, reduced
 * operations, etc., a representative
 * sample of the area is "not observed;"

* (ii) "AC," when a representative
 * sample of the area is "acceptable;"

* (iii) "Def." when deficiencies are
 * identified in a representative sample
 * of the area.

* (2) "Remarks." Describe deficien-
 * cies with specific references to loca-
 * tion, equipment, nature of deficiency,
 * how much, and name of plant personnel
 * notified, etc. Avoid nonspecific words;
 * describe observation with such items
 * as: meat residue, bone dust, grease
 * spots, unclean due to . . . ,
 * unsanitary due to . . . , etc.

(3) "Action Taken." Include any
 restrictive action taken such as
 equipment or area tagged, production
 downtime (approximate), etc. Before
 filing the report, close each entry
 with a specific corrective action or
 a reference to the Plant Improvement
 Program (PIP) and project number
 assigned.

Items scheduled for correction
 after the day's operation must be
 corrected before start of the next
 day's operation. Close such entries
 the following day with date,
 description of action, and the
 inspector's initials. File the form
 for the record.

Place items that are programmed
 for correction agreed upon between
 the IIC and plant management on the
 PIP by project number with a
 reference by date and general area
 number to the MP Form 455.
 Sanitation problems that can be
 corrected on a daily basis should
 not be listed for correction on the
 PIP. Programmed items are usually
 limited to facility changes, upgrad-
 ing deficiencies requiring major
 repairs, or extensive cleaning/
 refurbishing projects.

Plant management has total responsi-
 bility for maintaining an acceptable
 level of sanitation that will preclude
 the need for negative entries on the
 MP Form 455. The inspector will
 discuss each entry with the appropriate
 plant official who has authority to
 correct the deficiency and/or set up
 programs to prevent a recurrence.
 When discussion does not occur, or
 when the plant official disagrees with
 an entry, the inspector should enter
 the reason in the "Remarks" section.
 The IIC should encourage plant
 officials to add their written comments
 to the IIC's copy of the form. A copy
 of the report will be provided by the
 IIC to the plant official at the end
 of the day or the following day.

On a weekly basis or more often, if
 necessary, the IIC will discuss special
 problems and/or patterns of noncom-
 pliance with plant officials. Record
 the results of these discussions on
 or attach to the MP Form 455 for that
 day.

(c) Alternative

When the incidence of sanitation
 deficiencies is so infrequent that
 only a few entries are made on the
 MP Form 455, the CS may have entries
 made for a period of time not to
 exceed one week. Follow these
 instructions:

(1) Include a copy of the CS authori-
 zation in the MP Form 455 file,

the box to indicate
covered by the

deficiencies in
at the time they
date and the
will also be used
abbreviation under
"Pre-op and Oper".
use the abbreviation
for accepted areas,
entry may be placed
given on the form.
entries.

PIP with the circuit inspection before
discussing major facility or equipment
changes with plant management, or
before changing established completion
dates.

GENERAL SANITATION

Subpart 8.4

(Regs: M-308; P Subpart 11)

Sanitation, File

plant representative sign
entitled "Received by
official" and provide
official.

initial in the inspector's
calendar year and then
IIC
forms to the Area
is a possibility the
ded

Good housekeeping is essential to (1)
prevent product contamination, (2)
control objectionable odors, (3) avoid
vermin harborages and breeding places,
(4) minimize bacterial growth.

8.9 OUTSIDE PREMISES

Outside plant premises must be kept
clean and tidy. Location of the plant
and sanitation of its premises have a
direct effect on inside sanitation.

Product may be contaminated as it is
handled through doorway, loading
docks, etc., by odors from chemical
plants, smoke and a heavy burning
trash, dust from unpaved roads, etc.

Poor sanitary practices, rubbish
accumulations, and failure to control
weeds result in vermin harborages.

Suitable refuse containers, removal
of scrap, and storage of useful
materials on at least 12 inch high
racks are essential for proper
sanitation.

(a) Refuse Burning; Incinerator

Burning plant refuse outside is not
permitted, unless it is approved by
local authorities and is done in
properly constructed and sanitarily
maintained incinerators with concrete
base and screens for flying ash.
Unless these facilities are present,
plant refuse shall be removed daily
or more often, if necessary, to pre-
vent a nuisance.

WATER IMPROVEMENT PROGRAM

deficiencies noted on
are corrected the same
when they are of a
requiring more time for com-
structural changes,
repair, etc.), priority
given to product protection
actions can be made.

action methods and completion
should be as follows:

based upon by inspector-in-
and plant management,

confirmed in writing, and
a part of the PIP.

writeups are to be concise,
and include date of
and expected completion
if such a date cannot be
upon, the inspector-in-charge
one. He will consult his
before setting a due date,
failure by the establishment to
will result in a major curtail-
of a plant's operation or
suspension. Newly assigned or rotated
inspectors-in-charge must review the

(b) Livestock Holding Pen

Holding pens and drive alleys shall be kept reasonably clean to avoid animal soiling, odor, insect and rodent haborage.

Knocking box, nearby holding pen and restraining chute must be thoroughly clean before each day's operation.

8.10 DRY STORAGE

Good housekeeping and stock rotation are important in eliminating possible product contamination.

Spices, condiments, and curing agents shall be kept on racks in closed containers.

Dry storage areas shall be kept clean and dry and materials so arranged that the area can be cleaned.

Most supplies can be stored on 12-inch high racks. Movable pallets are acceptable if they are routinely moved and the floors are kept clean.

Dry materials may be stored without racks or pallets, provided they are closely piled and frequently moved--through rapid usage or otherwise--to keep the area clean and orderly.

Product ingredients must be handled and stored as "edible products."

Accumulation or storage of unnecessary or unused equipment in storage or working areas should be avoided.

To prevent product contamination, storage of soaps, detergents, or denaturing agents in product handling or holding areas shall not be allowed.

8.11 WASTE DISPOSAL

* Adequate waste disposal eliminates potential contamination sources. It may be categorized into sewage, grease recovery, organic wastes and rubbish removal.

* Liquid wastes must be promptly removed and must not accumulate in work areas, around premises, or over floors and cause sanitation hazards.

* (a) Manure, Hog Hair, Paunch Contents

* Manure removed from livestock pens frequently becomes a problem.

Immediate removal from the premises is the best procedure, but temporary storage is sometimes necessary.

Properly drained concrete storage bins may be used for temporary storage, provided manure is removed at least weekly, bins are thoroughly cleaned before reuse and are protected from insect and rodent infestations.

Hog hair, paunch contents, and the like shall be removed from the plant daily or as approved by RD. Hog hair must be removed from the slaughtering room in watertight metal containers at least at the end of the day's operation. It must either be removed from the plant in watertight metal truck and disposed of without creating objectionable conditions (fly breeding, odors, etc.), or it must be conveyed to suitable equipment within the plant for processing.

(b) Feathers; Viscera (Poultry)

To minimize possibilities of edible product contamination, to control insects and prevent offensive odors, feathers and poultry viscera should be promptly removed.

(c) Blood

Blood not processed within the plant must be removed daily in watertight covered containers. Container filling shall be done in a well-drained paved area with water outlets. Such area shall be washed at least daily and more often if necessary.

(d) Rubbish

Used paper towels, cartons, office waste, labeling materials, etc., may frequently be a sanitation problem. Suitable containers must be conveniently located throughout the plant and must be emptied frequently to control vermin and odors.

Rubbish must not cause a nuisance.

SERVICE AREAS
and sanitation
completely isolated
quarters.

contaminated with human waste
require immediate rejection of entire
room.

(e) Eating Areas

Food and beverages must not be con-
sumed or carried into product handling
and storage areas. Disposable food
and beverage containers must be dis-
carded in waste containers.

TOILETS
Toilets, showers,
facilities, etc.,
shall be con-
tinued maintained to
prevent, and breed-
rodents. An
service shall be

PERSONAL HYGIENE

Subpart 8 C

(Regs: M-308; P-Subpart 11)

appropriately located
provided for

personal equip-
be clean and dry to
remain attraction.
one person
be prohibited
to keep over-
and cockroach

Personnel with clean hands, clothing,
and good hygiene practices are
essential to the production of clean
and wholesome products.

8.16 WEARING APPAREL

(a) Garments

All garments (coats, frocks, etc.)
shall be clean, in good repair, and
of readily washable material. Street
clothes shall be covered while hand-
ling exposed edible product. Clothing
that becomes soiled or contaminated
during the workday shall be changed as
often as necessary. White or light
colored garments are desirable.

(b) Head Covering

All persons working where exposed
product is handled must wear suitable
head coverings to prevent hair from
falling into the product.

(c) Aprons, Wrist Guards

Safety devices, such as aprons,
wrist guards, etc., shall be of non-
absorbent material, clean, and in good

Inspection
and lockers must be
management and
monthly. Since
locked, a schedule
so all are left
clean.
should determine
adequate, clean,
air. Lockers needing
should be
representative
should be
All information should
Form MP 455.

must be maintained in
Toilets and urinals
and functional. Floors

repair. Persons handling edible products shall not wear leather aprons, wrist guards, or similar devices unless clean, washable coverings are used over them.

(d) Gloves

When during post-mortem inspection it becomes necessary for the inspector to wear gloves, such gloves should be of the surgical type.

Cotton gloves worn by persons handling edible product should not have dyed cuffs that may contaminate product and should be replaced when contaminated.

* Mesh gloves or guards must be
* cleaned and sanitized when contaminated and at the end of daily operations. If such gloves are worn by
* eviscerators and head or bung drop-
* pers, they shall be covered with
* gloves of impervious material. Mesh
* gloves must be promptly replaced if
* the links are broken or missing.

Light-colored rubber or plastic gloves may be worn by product handlers, provided they are clean and in good repair.

(e) Jewelry

Persons handling exposed product or working in processing departments shall not wear loose jewelry, earrings, brooches, high crowned rings, and wrist watches. Plain-band rings and pierced-ear type earrings without sets are exceptions.

(f) Tinted Glasses

Inspectors shall not wear glasses with tinted lenses during inspection, unless prescribed by licensed ophthalmologist or optometrist for color deficiency.

(g) Badges, Buttons

Persons handling products should not wear badges, decorative buttons, identification cards, etc. However, necessarily worn similar articles must be so attached to prevent accidental inclusion in product.

(h) Footwear

Shoes and boots should be appropriate for operations and, in most cases, of impervious material.

Eviscerator's boots. Persons working on moving top tables shall wear white or otherwise identifiable impervious boots, worn only on the table and adjacent boot cleaning compartment. They must use other footwear when walking to and from working area. To prevent contamination splash to viscera, carcasses, and table, such persons must clean and sanitize contaminated aprons, knives, or footwear in boot cleaning compartment.

(i) Personal Equipment

Cloth or twine wrappings on implement handles and web belts are not permitted.

8.17 INSANITARY PRACTICES

(a) Use of Tobacco

Program or plant employees must not smoke or use tobacco in areas where edible products or ingredients are handled, prepared, or stored, or where equipment and utensils are washed. If a plant has additional restrictions on smoking, MPI employees must observe them.

(b) Various Insanitary Practices

When handling edible product, scratching the head, placing the fingers in or around the nose or mouth, sneezing or coughing on product, etc., are prohibited.

(c) Restroom - Visit

All employees shall remove their aprons, scabbards, steels, knives, guards, etc., before entering toilet and urinal rooms.

(d) Hand Cream

Hand creams or lotions shall not be used by product handlers. However, they may be used in dressing and toilet rooms by persons leaving the plant.

(e) Fingernails

Persons handling exposed product shall keep their fingernails clean and neatly trimmed. Fingernail polish is not permitted.

8.18 NONFOOD HANDLER

All reasonable precautions shall be taken to prevent product contamination by visitors, maintenance personnel, and others.

Employees' traffic patterns that may result in product contamination should be eliminated.

WATER SUPPLY
Subpart 8-D

(Regs: M-308; P-Subpart H)

Plant water must be from an approved source, properly stored and distributed, and certified by local health agency. Nonpotable water may be used only as specified by regulations.

8.21 SOURCE**(a) Public**

Water from an approved supply is generally acceptable as delivered to a plant; however, it may get contaminated during plant distribution.

(b) Private

Private wells must be on premises, and must be completely protected from contamination by surface water, drainage from septic tanks, livestock pens, etc. Ground water must percolate through at least 10 feet of soil before entering the well.

8.22 CHLORINATION**(a) Chlorinators**

When chlorination is required to approve a private water supply, automatic chlorinators with devices indicating malfunctions must be used.

(b) Chlorine Test

Plant management is responsible for providing chlorine-testing kits, and for testing the water at least weekly to determine whether chlorine levels are as specified by State health agency.

(c) Chlorinated Water Sprays

They may be used intermittently on carcasses while being chilled and for bacteriostatic purposes, provided the procedure is approved by TS. Enough* data should be submitted showing that the proposed method (1) has beneficial results, (2) does not cause insanitary conditions--rust, condensation, etc.--and (3) plant's control assures no weight gain for any carcass.

After approval, TS will devise a* procedure to monitor the plant's control program.

Also as part of the control program each plant must provide at least five aerobic plate count determinations per month both before and after spraying. In addition, five semiannual determinations for the coliform group coagulase positive staphylococci and salmonellae both before and after spraying must be provided. Microbiological determinations shall be obtained by a suitable swab-dilution technique or equivalent procedure and the surface area examined shall be at least 4 square inches. All results submitted shall be provided in terms of bacteria per square inch except for salmonella determinations which may be reported as "present" or "absent." The inspector will maintain them in his official file for further analysis as directed by TS. Purpose of above microbiological counts is to establish a record of continued efficacy. Upon

a showing of undue hardship, plants with limited volume may propose, for evaluation by MPI, alternate means of establishing efficacy.

8.23 NONPOTABLE WATER

Untreated water from a river, lake, or unapproved well is considered non-potable and, if used, shall meet all regulation requirements.

Contamination Hazards. Where non-potable water is permitted, it must be used with adequate safeguards to prevent contact with edible products or potable water. Dead-end pipelines and improper cross connections of potable and nonpotable water lines shall be eliminated.

8.24 ICE

Water for ice making purposes must be potable. Ice producing, storing and handling equipment must be inspected for sanitary conditions.

Ice carried out of a poultry chiller with product may be replaced into the chilling system, provided it is collected and handled in a sanitary manner acceptable to the inspector in charge, and the ice is reused within the same day. If its cleanliness is questionable, it shall be rejected. Ice shall not be reused for chilling poultry product during further processing.

Since ice bag surfaces may become contaminated during handling, ice bags should not be placed over chill vats for emptying, unless the outer layer is removed.

Water and Ice Storage. It must be on the premises, and must be adequately protected from contamination.

Ice making or storing facilities (storage bins, etc.) should be lined with stainless steel or rust-resistant material. The metal should be of sufficient thickness to withstand repeated striking of a shovel without puncturing. Suitable perforated, rust-

resistant, and removable metal drainage plates should be provided at the bottom of the ice storage compartment, and frequently inspected to assure cleanliness. In some equipment used for producing flaked ice, water resulting from melted ice collects in a space below the ice storage compartment. This water should not be used in producing ice, nor in potable water lines or supply. It may be used to prechill water circulated in closed coils.

8.25 REUSE OF WATER

It must comply with the regulations. Complete drainage and disposal of reused water, effective equipment cleaning, and reused water renewal with fresh potable water must be done frequently enough to assure an acceptable water supply for intended purpose.

(a) Chilling Unit Water

Overflow water from poultry chilling units may be used to move heavy solids in eviscerating troughs, but not to flush the trough's sides. After screening out visible solids, it may also be used in scald tanks, wax-hardening operations, feather flow-aways, picker aprons, and for washing picking room floors.

(b) Water from Condensor or Compressor

It may be used as stated above if the system is closed and back-siphonage is prevented, or where artificially heated water is permitted, provided its potability is certified by a local or State health agency.

8.26 BACK-SIPHONAGE

Contaminated or polluted water may enter a water supply system when negative pressure develops. This can be prevented by eliminating submerged water lines or by using functional vacuum breakers between the last cut-off valve and the submerged line.

8.27 SAMPLING

Plant management is responsible for having a local or State health agency test and certify the water. Samples shall be taken at several points in the plant where water is used.

- * There are occasions where more than
- * one establishment is located in the
- * same building. If the entire building
- * contains only official establishments,
- * and there is a common water supply, it
- * is permissible to randomly sample
- * rather than sampling each establish-
- * ment in the building.

(a) Frequency

Water shall be sampled as often as necessary. Minimum requirements are: public water supply--annually; private water supply--semiannually; water from condensers--annually.

(b) Certification File

A file shall be kept in the inspector's office including: water and ice potability certificates and sampling results; pertinent information (i.e., well location, nonpotable water use, approvals, etc.); survey and inspection records.

SANITATION OF FACILITIES AND EQUIPMENT

Subpart 8-E

(Regs: M-308; P-Subpart H)

Facilities, equipment, and utensils shall always be clean and in good repair.

8.30 CLEANING AND SANITIZING

(a) Rooms, Compartments, Walls, Posts

Frequent and satisfactory cleaning of certain plant parts is necessary to (1) prevent accumulation of organic wastes resulting from meat and poultry operations, (2) prevent development of foul odors, and (3) provide a sanitary environment for handling food products. Method, frequency, and area to be cleaned may vary with operations.

Masonry walls or posts shall be kept clean, in good repair, and be protected by guardrails or suitable devices.

(b) Equipment and Utensils

They must be cleaned frequently or at least daily and, if necessary, before each use or between shifts to prevent organic matter accumulation.

(1) Litmus paper. Alkali or acid residues from cleaning agents may be detected with litmus paper.

(2) Various equipment (meat). The following items must be washed and sanitized after each carcass:

1. Contaminated equipment or utensil (pus, feces, ingesta, etc.).
2. Equipment or utensil used for suspect, retained, obviously diseased, or condemned carcasses or parts.

3. Brisket opening equipment.
4. Dehorning device.
5. Weasand rod.
6. Tail skinning clamp, unless tail tip ahead of clamped part is removed and discarded.
7. Swine head dropping knife.
8. Swine carcass splitting saw (when carcass is split before viscera inspection).
- * 9. Equipment used in carcass
- * splitting and withers "Topping"
- * (horses).

(3) Head hooks; loops. Equipment used for holding (cattle) heads during trimming shall be periodically rinsed.

Head hooks or loops in washing cabinets shall be rinsed after each head.

In continuous chain layouts, head hooks shall be washed and sanitized in approved and suitable cabinets or devices that will prevent splash onto heads, carcasses, facilities, or equipment.

(4) Automated moving table (meat).

It must be continuously washed and sanitized with 180° F. water.

An easily read and appropriately located thermometer is required to determine compliance.

(5) Viscera truck. It shall be washed and sanitized in approved areas, set aside to prevent splash contamination to product, facilities or equipment.

Viscera truck must be thoroughly washed and sanitized with 180° F. water (1) when contaminated (feces, ingesta, urine, pus, any exudate, condemned viscera, etc.), and (2) after plant break and lunch period.

Exception! Viscera truck may be reused with water rinse after each set of viscera, when livers are condemned for telangiectasis, "sawdust", unopened abscesses or liver flukes, provided it is not contaminated and is periodically washed with hot water to prevent fat buildup.

(6) Blood collecting equipment (meat). Funnel, containers, and knife must be rinsed after each carcass, and must be also sanitized after each identifiable lot of blood.

(7) Scalding tank. Scalding tanks must be drained and cleaned daily. Clean (potable) water must be used at the start of each day's operation.

(8) Shrouds. Shroud cloths shall be washed and thoroughly rinsed after each use.

New shrouds shall be washed before use to remove loose material and dirt.

Shrouds may be soaked in clean water or certain solutions--common salt, less than 20° salometer strength; acetic acid, less than 1 percent; sodium hypochlorite, less than 20 ppm--provided:

1. Carcasses are not clothed to increase weight through water absorption.

2. Cloths are not heavier and thicker than a heavy muslin grade and are applied in one layer only, except at unavoidable overlapping points.

3. Solution soaked shrouds are applied to carcasses only once.

4. Cloth rolls (sometime used in neck, renal, or iliac regions) are not wet in solution.

5. Carcass branding complies with regulations and Subpart 16-B of this manual.

(9) Pins. Shroud pins, used to attach shrouds to carcasses, must be cleaned before each use.

(10) Elevator. In some elevator shafts, water or other liquids from threshold of floor above may fall onto product moved on or off the elevator at lower levels. To correct this, a channel pitched to the corner of the shaft may be cut into the vertical face of the floor support. Then, an open, heavy steel gutter may be attached for cleaning and conveying all liquids

... into the pit

... mechanical pickers

... for adequate dis-

... operations.

... hollow arm of

... small opening on

... cleanup

... determinants to enter

... can be corrected

... evening or plug on

...

... quarter-inch

... bar and bed of

... allows a

... and fluid which

... of bacterial contamina-

... must be removed

... and allowed to air

...

... "flexible-type"

... bushings and

... buildup of prod-

... of various parts

... must be

... daily.

... usually cast

... must be

... for cracks or flaws.

... cutter. Some silent cutters

... aluminum emptying plug

... held by small bolts

... loosen and fall out allowing

... be filled with product.

... be removed and the plug

... cleaned. The top packing nut

... and cap to keep grease

... products. To make this nut

... cap screws should be used

... ends drilled permitting

... held in place by a wire

... preventing metal contami-

... of product.

(16) Jowl slicer. Mechanical slic-

... be cleaned and sanitized

... contaminated. This can be done

by a hood lowered over the machine,
or by rolling the machine into a
sanitizing cabinet.

(17) Bacon slicer. Stainless steel
strips at the base of some bacon
slicers may not be tightly secured,
and fat and juices may accumulate
and decompose. These strips can be
removed and the area cleaned. Strips
can then be welded to the base with a
stainless steel weld that should be
smooth ground and polished.

The recessed area at the guide's rod
end of some slicers allows grease to
accumulate. This area shall be
cleaned daily or more often, if
necessary, by removing the guide rod.

(18) Stuffer. Covers to clean out
openings of sausage stuffing machines
should be removed and interior
examined to determine cleaning need.

When pistons are "pulled" for clean-
ing, it is important to look for prod-
uct accumulation under the gasket,
along the cylinder wall, under the
edge of safety rings, and between
sections of the cylinder. The gasket
should also be examined for
deterioration.

Requirements on compressed air used
for operating a stuffer or other ed-
ible product equipment are described
in section 7.19.

(19) Cooker. In Jordan or other
type cookers, spray water may strike
sausage cages or smoked tree rollers,
washing grease or oil onto product and
into water reservoir. This may be
corrected by adjusting and lowering
the sprays or by installing a shield
on each side of the rail.

(20) Linking machine. Water forced
under linking machines is often con-
taminated by lubricating grease. To
prevent sausage contamination, the
machine should be placed in a stainless
steel pan at least 2 inches deep.

(21) Pickle injecting equipment. Equipment with multiple needles must be frequently examined. When a needle is missing or broken, a diligent search must be made until located or accounted for.

(22) Wrapping machine. Several machines convey product beneath heat sealing units before wrapping. Such equipment must be examined to determine whether product contamination occurs.

A removable rust-resistant metal tray below the heat sealing unit protects product from contamination.

(23) Cereal--Equipment cleaning. Equipment used for preparing sausage with cereal or similar ingredients shall be cleaned before preparing product without such additives.

(24) Pork--Equipment cleaning. All equipment and utensils used for pork product (possibly containing live trichinae) must be thoroughly cleaned before being used for product not requiring trichinae treatment.

(25) Rendering tank. Gate valves on lower openings of wet edible rendering tanks allow product to accumulate in the valve bonnet. Inner parts of this valve must be flushed daily and dismantled as often as necessary for cleaning and inspecting. Hot water and steam pipelines may be permanently connected to the bonnet for cleaning, but precautions should be taken to prevent back siphonage.

Exhaust or pressure release lines of edible rendering tanks should be satisfactorily maintained and arranged to prevent any condensate from draining into the tanks after venting.

(26) Edible rendering expeller. All parts must be thoroughly cleaned and inspected. To accomplish this, it is necessary to remove the plates forming the barrel around the press

worm and demount or provide cleanout openings in the feeding mechanism.

(27) Smoke making equipment. Ducts, smokehouses, etc., must be located and constructed to facilitate cleaning of all inner and outer surfaces.

(28) Boards. Those used on boning and cutting tables should be of approved plastics, as small as practical, and with beveled edges to prevent chipping.

Close grained hardwood boards are acceptable, provided they are smooth and in good repair.

All boards must be removed, thoroughly cleaned, sanitized and air dried after each day's operation.

(c) Cross-Utilization of Equipment

Sanitary requirements for equipment and utensils are difficult to control outside the plant. Therefore, cross-utilization of same equipment inside and outside the plant is prohibited. Edible product equipment should be confined to edible product areas.

(d) Product Cleaning; Equipment (Meat)

Product accidentally soiled may be cleaned, provided the pieces are individually and promptly washed under water sprays. Unclean product must not accumulate either before or during washing.

Where washing is inadequate to remove contaminants, trimming is required.

Unclean, frozen product should be cleaned before defrosting in water or pickle. Loose material from containers should not be allowed in defrosting solution.

See also sec. 7.20, 11.5 and 11.6.

8.31 POSSIBLE CONTAMINATION SOURCE

(a) Paint, Dust

Scaling paint and dust must be removed from walls and overhead structures in edible product departments.

(B) Rust

It must be removed from equipment and overhead structures in edible product departments.

Corroded or rusted equipment and utensils may be prevented with approved antirust agent, which shall be removed (by washing before equipment is used).

(c) Condensation

(1) Plant responsibility. Management shall take adequate measures to prevent product contamination from condensate. When a condensation problem occurs, plant management shall:

1. Cease activities where product contamination cannot be avoided.
 2. Remove product from area and/or protect it from condensate.
 3. Hold contaminated product for reconditioning or condemnation.
 4. Initiate actions to find and eliminate cause. The following suggestions are examples of successfully applied approaches to condensation control:
 - a. Limit air exchange at openings (chutes, doors) with foyers, self-closing doors, partitions, air screens, etc.
 - b. Remove moisture from air that enters through doors or other openings and before it spreads into work areas by placing dehumidifiers in path of normal air currents.
 - c. Pressurize work areas to limit entry of moist air from uncontrolled sources.
 - d. Condition (filter and heat, cool or dry as appropriate) makeup air in work areas.
 - e. Insulate walls, ceilings, pipes, etc.
 - f. Install forced air circulation fans, etc.
 - g. Install electric heat tapes or steam lines in insulation or surfaces of areas subject to insulation.
- Control use of water and steam.

- i. Place exhaust hoods over vapor-generating equipment.

(2) MPI responsibility.**(i) Inspector.** He shall:

1. Retain contaminated product for reconditioning or condemnation.
2. Reject problem areas until temporarily or permanently corrected.
3. Notify plant of unacceptable conditions.
4. Inform circuit supervisor of actions taken.
5. Document (on MP Form 455) existing or potential problem areas, and record action(s) taken by inspector and corrective action(s) taken by plant personnel.
6. Regularly review plant's condensation control program. Discuss with management the progress made on meeting the timetable for long range, permanent corrective actions.

(ii) Circuit supervisor. He shall:

1. Approve or revise inspector's actions.
2. Have option to extend allowable time for temporary measures, if the plant is conscientiously working out corrective measures and states definite, realistic time limits for full corrective action.
3. Notify plant management in writing if corrective measures are inadequate. Document all time extensions.
4. Initiate followup check to assure corrective action is taken.
5. Inform area supervisor if problem is not resolved at circuit level.

(d) Lubricant

Equipment lubricated by grease or oil shall be frequently examined to assure product is not contaminated.

Corrosion on galvanized equipment may be prevented by cleaning and a light application of colorless, odorless, paraffin oil.

Equipment surface that will possibly contact product must have all oil removed (by washing) before use.

Oil must be drained from trolleys, gambrels, hooks, etc., before use. Dipping oils shall be kept free of floating debris and foreign film by frequent skimming to avoid transfer to trolleys, gambrels, hooks, etc.

To prevent product contamination with toxic compounds, all lubricants used where potential product contamination exists must be edible and approved by CH.

(e) Staples, Clips

Staples from metal stitching machines are a dangerous source of contamination. Such machines shall not be operated near open containers of product.

Metal-stapled containers and wire-bound boxes should be carefully opened to avoid possible product contamination. Uncrimped staples are prohibited in fiberboard product containers. Copper-type (coated) staples and wire shall not directly contact exposed product.

Small staples are not permitted for attaching paper or burlap covers.

Metal clips or staples shall not be used for affixing labels or tags to product.

(f) Tag Fastener, Skewer

Metal or other fasteners used for identification tags shall be removed after serving their purpose. Fasteners that cannot be readily removed shall not be used.

Wood, metal, and other skewers shall be removed from carcasses before cutting or boning.

(g) Wire Brushes, Steel Wool

They must not be used on product and equipment contacting product.

(h) Various Metal Contaminants

The following sources of metal contamination shall be carefully

considered: worn can openers, broken or worn parts of equipment, loose hooks, unnecessary pipes and wires, metal strapping from containers, bacon hangers, belly spreaders, worn metal containers, improperly welded equipment, etc.

(1) Aluminum equipment. Friction between meat and aluminum often results in a black discoloration of product surfaces. Hard metal meat hooks may cause abrasion of aluminum rails which results in metal particles' deposit on product. *

(2) Welded equipment. It shall be carefully examined for metal beads and slag pieces.

(i) Sawdust

It shall not be used on benches, equipment, or floors where grinding, boning, cutting, or packing operations are conducted.

In meat carcass holding coolers, a thin layer of clean, odorless sawdust may be used, provided it is replaced weekly or more often if necessary.

When it is necessary to go through processing departments, sawdust must be conveyed to and ashes removed from smokehouses in metal containers with tight fitting lids.

(j) Anti-Slip Material

Approved natural earth minerals may be used for spot application on hazardous floor areas, provided they do not cause dusting, tracking, or other objectionable conditions.

(k) Paper, Plastic

To avoid product contamination with wood splinters, slack barrels and similar containers, vehicles, and cars shall be lined with suitable paper or plastic before use.

paper used as a container lining, must not disintegrate when in contact with the product. All paper adhering to the edible product shall be removed before the product is cut.

Plastic, used as immediate container or in manufacture of such container, must not contain any material which may contaminate food product.

(1) Shovel

Shovel edges shall be kept smooth. They shall be ground as necessary to prevent debris accumulations and rolling edges from crumbling and falling into product.

Ice shovels shall be constructed to facilitate maintenance and sanitation. Wooden handles are unacceptable since they absorb moisture, support bacterial growth, and shed splinters onto product.

All shovels used for edible product or ice shall be kept off the floor. Shovels used for inedible product shall be identified.

(m) Bottles

Glass bottles other than product containers are not permitted in operating departments.

(n) Window Panes

Broken or cracked window panes shall be replaced promptly.

(o) Pallets

Structurally acceptable and clean pallets of approved material--metal, plastic, wood, etc.--may be used for temporary in-plant storage of packaged or properly protected unpackaged product, and for transfer of packaged product. Wood pallets shall not be used in lieu of operating equipment (tables, stands, storage racks, etc.) or for product defrosting, nor shall they contribute to unsanitary conditions or result in product contamination.

* (p) Denaturants

* Finely powdered dry charcoal applied to inedible products may become deposited on overhead structures by air movement and become a potential product contaminant. Therefore, charcoal should not be used as a denaturant in forced-air refrigerated processing areas. Denatured products stored in areas with edible products should be in closed containers.

8.32 MAGNETIC TRAPS

They may be used for removing iron particles from chopped product; however, they shall not be used as substitute for inspection procedures.

8.33 CAR, TRUCK, TRAILER

Product shall be loaded only in suitable and clean cars, trucks, or trailers. As a minimum requirement, vehicles shall protect product from weather and road contamination, and shall be free of objectionable odors and foreign materials--meat and fat particles, grease, trash, dust, etc. Vehicles hauling exposed product have the requirements of immediate containers. All interior surfaces must be clean and intact. Closed doors must produce a dust-proof seal.

8.34 CONTAINER

(a) Immediate Container

It may be of acceptable cloth, cardboard, paperboard, metal, wood, glass, plastic or a combination.

(1) Truck, gondola. Properly closed and sealed metal trucks or gondolas may be used for shipping product between official plants and approved warehouses.

(2) Cardboard combo-bins. These or similar large containers--strong enough to withstand distortion during handling or product shipping--may be used as above and for intraplant purposes. Reuse of these containers shall be based on criteria in section 8.34(c)(3).

Large cardboard containers, used for product identity (Part 18) or when required to prevent product contamination

tion, shall be covered by an overlapping lid of same material as the container, or by a heavy gauge poly-bag liner at the top and a plastic cover-- of at least the same strength--placed over the container and securely fastened to the sides.

(b) Metal Container

(1) Drum. Drums coated on inner surface with lacquer or resin may be used for rendered fats if coating is smooth, odorless, hard, does not peel or blister, and is approved by SCI-FIAD.

Such approval is given only to manufacturer after submitting a statement showing chemical composition, intended use, application method, reaction to water and fat, etc.

Steel drums may be used as containers for (meat) products other than edible

rendered fats, provided they are:

1. Used as shipping containers only.

2. Free of debris, rust, corrosion, and galvanized.

3. Reasonably free of dents and distortions, and with tight seams.

4. Lined with a water-tight bag of approved plastic at least 2 mils thick, and cleaned (inside and out) before liner insertion.

(2) Used Drum. Steel drums (used for edible rendered fat) may be reconditioned without prior inspection; however, they must be carefully examined by the inspector before use to determine whether former contents have been removed, galvanizing or lining is intact, inner surface is free of dents, cracks, etc.

Acceptability of steel drums as product containers can be determined by examining them for cleanliness and absence of possible contamination sources.

Acceptability of inner surface coating can be determined by submitting to * SCI-FIAD name of material used and name and address of firm that applied the coating.

(3) 30-Pound Tin Can. Standard 30-pound cans with fitted covers are acceptable for packing unrendered (poultry) fat after chilled to 40° F.

(c) Wooden Container

(1) Slack barrels. These and similar containers shall be carefully examined for wooden splinters, and shall be lined with suitable material.

In opening slack barrels and similar containers, product contamination by nails and wooden splinters must be prevented.

In opening burlap or muslin-covered slack barrels, cloth covering shall be completely removed before puncturing the paper under the cloth.

(2) Boxes, crates. Fiberboard boxes of sufficient strength, properly lined wooden crates, or wirebound boxes may be used as product containers.

Wirebound boxes are unacceptable as immediate containers for unrendered (poultry) fat.

(3) Used wooden or fiberboard containers. They may be reused as edible product containers provided they are:

- a. Structurally acceptable, clean, and free from contaminants--splinters, stains, odors, fat and meat particles, dust, etc.

- b. Carefully checked by plant employee before use and, if unacceptable, rejected and destroyed promptly.

- c. Properly stored in an area approved by inspector in charge.

- d. Lined with suitable material and labeled as required by regulations. Nonapplicable labeling or printing must be removed or covered by masking paint.

Exception. Containers provided by customers for their own product are exempt from these requirements if they are clean and properly lined to protect the product.

When above requirements are not met, reuse of such containers shall be discontinued.

For additional protection, paraffined paper cups may be used for closing barrel or tierce bungholes.

... mentioned before
... are unacceptable,
... difficult to deter-
... former contents
... for edible prod-

CHEMICAL COMPOUNDS

Subpart 8 F

(Regs: M 318, P Subpart H)

... curing vats. Wooden curing vats
... fully examined and recon-
... necessary.

... vats shall be
... from curing
... All slivers, blisters,
... discolored wood
... Vats shall be
... clean finish.
... shall be replaced.

... and outer surfaces have
... vats shall be washed
... and steam. To prevent con-
... outer surfaces, vats should
... curing departments on
... trucks, and not be rolled
... floor

(d) Waste Containers

... containers shall be pro-
... trash and similar wastes.
... emptied frequently to
... accumulations.

... containers shall be smooth
... and rust-resistant
... to prevent offensive odors
... they must be thoroughly
... before returning to edible
... and after each
... use. Cleaning should be done
... rooms.

Perforated barrels may be used for
... feathers until loaded on
... and removed from the plant.
Also, trucks may be used for feathers
... directly conveyed from poultry dress-
... rooms, provided truck apron and/or
... areas are satisfactorily paved
... and sloped to drains.

(e) Emptying Certain Containers

Cloth, paper, or similar containers
... shall be emptied so that lint or dirt
... (from outer surface) does not contami-
... product.

8.37 APPROVED CHEMICALS

(a) Use

Only approved and properly labeled
chemical compounds shall be used. See
"List of Chemical Compounds Authorized
for Use under USDA Poultry, Meat,
Rabbit, and Egg Products Inspection
Programs."

(b) Identification

All approved materials shall be
identified by a system acceptable to
the circuit supervisor.

(c) Plant's Responsibility

Plant management is responsible for
notifying the inspector in charge upon
receiving a chemical compound into the
plant.

(d) Inspector's Responsibility

When a chemical compound is delivered
to the plant, the inspector must deter-
mine its acceptability, and must assure
that it is used for intended purpose.

8.38 UNACCEPTABLE COMPOUNDS

Approval by STS-SS for a material
chemically satisfactory is granted,
provided it is acceptable when used.
If a material disintegrates, has an
odor, transfers color to product, or
results in an objectionable condition,
it is unacceptable even though origi-
nally approved. In this case, deter-
mination can be made at plant level
only and the inspector must make the
final decision and notify STS-SS.

If there is any doubt about a material listed in the "List of Chemical Compounds," a sample should be sent to USDA, FSQS, SS, Compounds Evaluation Unit, Bldg. #306, Room 300, BARC-East, Beltsville, Maryland 20705.

8.39 UNLISTED MATERIAL

(a) Approval Letter

Materials not listed in the "List of Chemical Compounds" shall be rejected, unless the establishment or seller has an "approval letter" from STS-SS, dated after the current publication. Such letter permits use of accepted materials during publication's revision.

Approval letters shall be filed in the inspector's office until the compound is published in the authorized publication.

(b) Paint, Lubricant, etc.

Certain materials--paints, lubricants, and other than chemical food additives--are not categorized in the "List of Chemical Compounds," but may be used if the establishment or seller has an approval letter. If such letter is not available or there is doubt about a compound, the inspector must submit a sample to STS-SS.

(c) Approval Request

The "List of Chemical Compounds" contains appropriate procedure to be followed when requesting approval for a material or chemical.

8.40 VOLATILE CHEMICALS

Chemicals and oils with pronounced odor shall not be used where edible products are handled, processed, or stored. Approved compounds may be used in dressing and rest rooms, and in inedible product rooms not opening directly into edible product departments.

Odor-masking compounds are not allowed for disguising insanitary conditions.

8.41 SANITIZING MATERIAL

Chemical solutions used to reduce surface bacteria are known as "sanitizing agents." Since their effectiveness is greater on clean surfaces, facilities and equipment should be thoroughly cleaned before application. Product must be removed from the area or be adequately protected.

Warning! Dry chemicals or concentrated solutions are extremely irritating to mucous membranes. Avoid contact with eyes or nasal passages.

Preparations of quaternary ammonium compounds and those of high available chlorine content--sodium or calcium hypochlorite, chloramine T, dichloramine T, and chlorinated cyanuric acid--may cause fire if mixed or stored together.

Information on authorized sanitizing materials and their concentrations may be found in the "List of Chemical Compounds."

8.42 FREEZING SOLUTION

Brine solutions may have sodium chloride (salt) and/or calcium chloride. Solutions other than brine solutions may have chemicals such as propylene glycol. If such solutions are considered for use, management shall furnish STS-SS with:

1. Name and percent of each chemical.
2. Packaging type used before freezing.
3. Whether or not freezing equipment has adequate spray washing facilities for washing packaged products after freezing and before placing into shipping containers.
4. Any information on procedure and equipment that may help determine the freezing solution's acceptability.

Products must be packaged in impervious bags before being chilled or frozen in a system using these chemical solutions.

If product contamination occurs as result of bag breakage, product must be rewashed immediately by spraying. All traces of refrigerant must be removed before product is passed for food. If all contamination cannot be removed by washing or trimming, affected portion must be condemned.

8.43 DRY ICE

When product is stored or shipped, dry ice (solid carbon dioxide) may be applied directly to it, used as an adjunct to, or as a substitute for refrigeration.

Precautions. High levels of carbon dioxide are harmful and may produce unconsciousness.

To assure that dry ice does not constitute a safety hazard, management must:

1. Provide dry ice dispensers (snowing hoods) with mechanical ventilation to eliminate accumulated gas. To be effective, exhaust intakes should be near floor level.

2. As a warning, identify rooms or areas where dry ice or product with dry ice is stored.

3. Monitor processing rooms where dry ice is used to assure that carbon dioxide does not exceed the time weighted value .5 percent (5,000 ppm) maximum level set by the Occupational Safety and Health Administration. This limit does not apply to coolers, freezers, or storage rooms. Measurements should be taken about 5 feet above floor level.

INSECT AND RODENT CONTROL

Subpart 8-G

(Regs: M-318; P-Subpart H)

8.46 PEST MANAGEMENT

Pests may transmit diseases to humans through food contamination. Thus their presence in or around meat and poultry plants creates a public health hazard. To the fullest practicable extent, their breeding, harborage, and entrance into plants should be prevented. Prompt and effective measures are required to eliminate pests which do gain entrance to official establishments. In order to maintain preventive control measures, the inspector in charge (IIC) must require sound sanitation, construction, maintenance, and pest exclusion programs, that are supplemented with careful application of approved pesticides.

(a) Sanitation and Housekeeping

Potential harborage and/or attractants of insects or rodents such as accumulations of hog hair, feathers, debris, manure, paunch contents, old clothing, cluttered storage areas, and unused or discarded equipment and materials are prohibited.

(b) Local Cooperation

Plant management should solicit cooperation from adjoining property owners and from local health authorities to eliminate breeding or hiding places on adjacent property and to develop an insect and rodent control program.

(c) Structural Deficiencies and Building Maintenance.

Buildings and equipment harboring pests shall be repaired or replaced. Floors, walls, partitions, and ceilings must be of USDA approved tight-fitting material which does not permit entrance and breeding places for cockroaches or other pests.

Broken areas and cracks in walls or separations at adjoining surfaces, such as floorwall junctions, shall be sealed with approved material within a period of time agreed upon by plant management and the IIC. The IIC may include major projects in a planned improvement program.

Areas tunneled by rodents must be sealed with concrete, brick, or other approved rodent-proof material. Floor drain strainers must be effective and kept in place to prevent rodent entrance through drainage lines. All openings should be screened, made to fit tightly or otherwise protected to prevent entrance of flies, rodents, birds, etc.

8.47 PESTICIDES, GENERAL

See the "List of Chemical Compounds" for USDA approved materials and their uses. **WARNING!** Fumigants, many insecticides, and rodenticides are toxic. If inhaled, ingested, or absorbed through the skin they may cause serious illness.

(a) Use

The Federal Insecticide, Fungicide, and Rodenticide Act, which is administered by the Office of Pesticide Programs, Environmental Protection Agency (EPA), requires that all pesticides (including fumigants, avicides, insecticides, and rodenticides) be registered and that they be used only for intended purpose according to EPA regulations and EPA registered labels and supplementary labeling instructions. States also regulate users of pesticides through licensing and certi-

fication programs. Pesticides which have restricted uses may be used by certified applicators or under their direct supervision. It is illegal to use or recommend the use of any pesticide in a manner inconsistent with its labeling and EPA regulations. Use of pesticides in official establishments is subject to review by the IIC

(b) Responsible Person

Residual pesticides which may not be purchased by the general public (EPA restricted use pesticides) may be prepared, mixed, and used only by or under the supervision of a certified applicator. Such persons must comply with State and EPA requirements and USDA guidelines for the use of pesticides. All other pesticides (EPA general use pesticides) may be prepared, mixed, and used by any representative of the official establishment or its pest control company.

(c) Storage

If the pesticides are stored on the premises, they must be kept in closed containers, separate from other material in an area acceptable to the IIC, and under the control of a responsible plant employee.

(d) Pest Control Program

The primary responsibility of pest control programming lies with the owner/operator of the official establishment. The IIC will review a proposed program that includes product labels before implementation, and periodically thereafter. Deviations from the accepted program may be allowed only with the concurrence of the IIC. Plant management will provide the IIC with a report listing the materials used and the areas treated after each application.

* 8.48 INSECTICIDES

* (a) Residual Insecticides

* These provide control of pests
* for several hours or longer after
* application. Insecticides that may
* be used are those which are labeled
* for use in food establishments and
* which contain active ingredients
* such as: Baygon, bendiocarb
* (Ficam), carbaryl (Sevin), chloro-
* pyrifos (Dursban), diazinon,
* dichlorvos (DDVP, Vapona), dimethoate
* (Cygon), Dipterex, fenthion (Entex),
* lindane, malathion, methoxychlor,
* ronnel.

* Products containing these ingredients
* must appear in the "List of Chemical
* Compounds."

* The official establishment must
* strive to avoid chemical dependence
* by establishing effective sanitation
* and maintenance programs coupled
* with programs to prevent reinfesta-
* tion. Insects, their larvae, and
* their eggs in incoming supplies
* should be destroyed by fumigation
* or other effective means before they
* enter the establishment or in
* isolated storage areas after enter-
* ing the establishment. Residual
* insecticides may be appropriate to
* kill insects that succeed in enter-
* ing or to combat established
* populations

* Plant management must inform the
* IIC of the treatment schedule. The IIC
* will determine the necessary degree of
* monitoring or observation. The need for
* the presence of an inspector during the
* chemical application may be minimized if
* experience has demonstrated the relia-
* bility of plant management and the
* insecticide applicator. When treatment
* is permitted in the absence of an
* inspector, the IIC may require the plant
* to identify the proposed treatment sites
* in advance to permit review during an
* inspector's normal tour of duty. The
* IIC may also permit the recording of
* the sites at the time of treatment for

later review by the inspector. The
* should be reviewed to determine if
* chemicals are placed in appropriate
* sites; adequate followup maintenance
* is completed, and if chemical
* being used as a substitute for effec-
* tive sanitation, maintenance,
* reinfestation prevention program.

(1) Permitted methods of
* application. Residual insecticides
* are commonly applied as contact
* sprays in the form of emulsions,
* wettable powders, or soluble
* Under special conditions, they may
* be applied as baits, powders, or
* pellets (see section 8.48(c)).
* General or spot treatment applied
* through a fan spray nozzle and under
* low pressure (to avoid splashing
* spray mist) is useful on exterior
* surfaces of buildings and in immediate
* product areas and in certain non-
* processing areas. Crack and crevice
* treatment which is allowed in all
* areas is a more restrictive method
* of use. It is defined by EPA as
* "application of small amounts of
* insecticides into cracks and crevices
* in which insects may hide and through
* which they may enter the building."

(2) Permitted conditions of use.
* EPA registered labels provide direc-
* tions for the use of pesticides in
* food areas and nonfood areas of
* food establishments. The following
* categories further define and limit
* the use of pesticides to prevent
* inadvertent transfer to edible prod-
* uct areas. Any use of a pesticide
* in an official establishment must
* first conform to the prerequisites
* described in section 8.46.

(i) Outside premises. Use of pesti-
* cides is permitted according to EPA registered
* labels. Precautions must be taken
* to prevent airborne insecticide con-

* affected insects from entering edible
* product processing or storage areas
* through open doors, windows, service
* entries, ventilating systems, etc.

* (ii) Inedible product areas. Use is
* permitted in condemned or inedible
* product areas such as storage rooms,
* docks, rendering rooms, and similar
* inedible areas according to methods
* on EPA registered labels for nonfood
* areas in food establishments.

* (iii) Nonprocessing areas. Use
* is permitted according to methods
* on EPA registered labels in areas
* such as tool and machinery rooms,
* pump rooms, boiler rooms, and
* elevator shafts or pits. Insecti-
* cide applications are not permitted
* that may result in transfer to
* employees, their work clothing, or
* the other materials and objects
* that may contact product. Therefore,
* residual insecticide applications in
* nonprocessing areas such as
* inspector's offices, locker rooms,
* wash rooms, halls, stairwells,
* foreman's office, restrooms, and
* lunchrooms or cafeterias, that are
* frequently used by employees whose
* primary duties are in edible food
* areas, are normally limited to crack
* and crevice treatment. Spot applica-
* tions may be considered if they
* are detailed in a pest control pro-
* gram that is submitted to the IIC.
* The IIC will evaluate the program,
* and attach comments and other
* pertinent information before forward-
* ing it through channels to the
* Facilities, Equipment and Sanita-
* tion Division (FESD) for approval.

* (iv) Edible product areas. Use
* of residual insecticide in edible
* product areas, including areas where
* exposed edible product, its equip-
* ment, or its containers are stored
* is limited to crack and crevice
* treatment as a supplement to the
* prerequisites in section 8.46 and
* in accordance with EPA label
* directions.

1. They are not to be used for space
treatment such as misting or fogging,
for surface treatment such as floor-
wall junctions in rooms where their
use is restricted to crack and
crevice treatment, or on surfaces
contacted by personnel, equipment
or clothing that may result in
secondary transfer to product.

2. Production operations are not to
be conducted in the area at time of
treatment. All exposed edible prod-
uct and its packaging materials are to
be removed, tightly covered, or stored
in closed containers.

3. Broken areas such as cracks
in walls or separations at adjoining
surfaces (for example floor-wall
junctions) should be large enough
to permit deep delivery of the insecti-
cide into the insects' nesting sites
while minimizing surface contamina-
tion. Openings may also be made in
internal hollow walls to permit
treatment of the insects' nesting
sites. Walls that show evidence of
water seepage should not be treated
internally until all such seepage is
corrected. Residual insecticides
may be used inside electrical panels,
light switches, motor housing, and
similar areas in which insects cannot
otherwise be effectively controlled.
The IIC will refer questionable or
unusual proposed treatment site
requests through channels for
evaluation by FESD.

4. After treatment, areas should
be ventilated to remove insecticide
odors, and the facilities and equip-
ment thoroughly washed with an accepta-
ble detergent solution and rinsed with
potable water to remove contamination.
A slight odor near a treated crack or
crevice is generally not
objectionable.

5. The treated cracks and crevices
are sealed with appropriate material
within a period of time after treat-
ment agreed upon by plant management

* and the IIC. The IIC may include
 * major projects in a "Planned Improve-
 * ment Program."

* 6. If adherence to all of the above
 * provisions does not result in elimina-
 * tion of the insect infestation, the
 * inspector in charge may permit
 * repeat treatments under the same
 * provisions. However, the inspector
 * must continue to require sound construc-
 * tion, sanitation, maintenance, and
 * reinfestation prevention programs
 * to avoid hazards related to chemical
 * use.

* 7. Requests by plant management
 * for residual insecticide treatment
 * programs not covered by this section
 * must be submitted through the
 * inspector in charge to FESD.

* (b) Contact Insecticides (nonresidual
 * or knockdown) - Sprays, Aerosols

* (1) Contact insecticides have
 * shortlived effectiveness and are used
 * to kill insects on contact or to
 * flush them from hiding places. They
 * may be used in nonprocessing and
 * inedible areas in accordance with the
 * EPA registered label. The permitted
 * methods of application in nonprocessing
 * and inedible areas include:

* a. Pressurized containers pro-
 * ducing coarse wet spray or delivery
 * of spray through a tube which is
 * inserted into cracks and crevices.

* b. Compressed air (pump) sprayers
 * which deliver a coarse wet spray or
 * delivery through a tube inserted
 * into cracks and crevices.

* c. Ultra Low Volume (ULV) machines
 * that dispense aerosol mist into
 * general spaces and accessible voids.

* d. Pressurized containers which
 * may be hand held or mounted for
 * timed actuation to release aerosol
 * mist into general space.

* e. Timed, automatic devices which
 * dispense an aerosol mist at regular
 * intervals throughout a 24-hour period

according to EPA registered label
 direction.

(2) Contact insecticides may be
 used in edible product areas in
 accordance with the EPA registered
 label. However, since their effects
 can be extended for a short period
 of time depending on the concentra-
 tion of active ingredients and/or the
 amount of chemical applied, they are
 further restricted (see section
 8.48(b), 3, a and b). These
 "nonresidual" or "knockdown" insecti-
 cides kill insects only on direct
 contact at the time of application.
 They may be used in edible product
 areas, provided exposed edible prod-
 ucts and their packaging materials
 are removed, tightly covered, or
 stored in closed containers before
 spraying. Facilities and equipment
 must be thoroughly washed with an
 effective cleaning compound and rinsed
 with potable water after spraying.

(3) The following nonresidual
 insecticides may be used according
 to the directions on the EPA
 registered label: allethrins,
 lethanes, pyrethrins, pyrethrum
 extract, synthetic pyrethrins
 (SBP-1382 Synthrin, NIA 17370).
 Products containing these ingredi-
 ents must appear in the "List
 of Chemical Compounds."

a. Concentrations of 1 percent
 or less, alone or in combination,
 of the following synergists may be
 used with the above insecticides:
 piperonyl butoxide, piperonal bis
 (2-butoxyethoxy) ethyl acetal
 (Tropital), N-octyl bicycloheptene
 dicarboximide (MGK 264), n-propyl
 isome, sulfoxide.

b. Synergist concentrations up to
 a maximum of 5 percent are accepta-
 ble when the insecticide is dispensed
 as an aerosol spray.

* 4. The permitted methods of appli-
* cation in edible areas include:

* a. Space spraying which is the
* dispersal of insecticides into the
* air by foggers, misters, aerosol
* devices, or vapor dispensers to
* control flying insects and exposed
* crawling insects.

* b. Contact spraying which is the
* application of a wet spray to hit
* or wet the individual insect with
* the spray mist.

* c. Timed, automatic devices which
* dispense an aerosol mist at regular
* intervals. They may be operated in
* edible product processing or storage
* areas only when food products are not
* being processed or stored in open
* containers. The use of nonresidual
* insecticides on an intermittent basis
* (less than 24-hours a day) may signi-
* ficantly affect the efficacy of the
* insecticides. Since they may not
* be operated during production hours,
* the registered label for nonresidual
* insecticides proposed for automatic
* dispensing in edible product areas
* must include direction for less
* than 24-hour operations to sub-
* stantiate their efficacy under those
* conditions.

* (c) Baits, Pellets, Powders

* In livestock pens, poultry receiving
* areas, and other similar areas, EPA
* registered and USDA approved residual
* baits, powders, or granular materials
* may be used to control insect pests.
* Except for baits in labeled dispenser
* containers, such products must be of
* distinct blue or green color. Care
* must be taken that baits are not
* ingested by livestock or poultry.

* (d) Repellants

* Compounds with di-n-butyl succinate
* are effective repellants and can be
* used for exterior door and window
* facings, near loading docks, and
* outside areas.

(e) Fumigants

(1) Non-proprietary Fumigants
with hydrocyanic acid, methyl bromide,
or phosphine (from aluminum phosphide)
gases is sometimes necessary for
eradication of vermin or insects.
Since these gases are extremely
poisonous, they must appear in
the "List of Chemical Compounds,"
and be used according to label
instructions with the approval of
the IIC. All labels must be
registered by EPA. An experienced
certified fumigator must be placed
in charge of operations.

(i) Fumigation of Premises. All
edible products and their packaging
materials must be removed from rooms
before fumigation, with the following
exceptions.

1. Packaged products. 2. Infested,
uncooked cured hams, uncooked cured
bacon, and cooked sausage that are
fumigated to destroy an infestation,
such as ham beetles, before they are
moved to inedible areas.

(ii) Fumigation of Product. When
fumigation is used to eradicate
mites, skippers, beetles, and
similar insects from infested cured
hams or similarly cured products,
the infested meat must be condemned
and removed after such treatment.
Uninfested meat or product must be
aerated for at least 48 hours before
packaging or further processing.
Food contact surfaces must be rinsed
thoroughly with potable water before
processing is resumed.

(2) Proprietary Fumigants. When
compounds are prepared from one or
more chemicals and their combination
results in a gas, they are referred
to as "proprietary" fumigants. Such
fumigants must appear in the "List
of Chemical Compounds" and be used
according to label instructions with
the approval of the IIC. Their

* ... with EPA
 * ... for use
 * ... plants. Pro-
 * ... may not be used
 * ... products. All
 * ... products and
 * ... materials must be
 * ... to be fumigated.
 * ... must be rinsed
 * ... product is

* (3) Room Ventilation Test. After
 * ... treated space must
 * ... ventilated. An
 * ... fumigator
 * ... and all other
 * ... within the struc-
 * ... ensure the gas
 * ... from the room,
 * ... equipment.

* (f) Outdoor Pest Control Compounds
 * ... for outdoor use
 * ... bird con-
 * ... other pest con-
 * ... used around
 * ... premises of
 * ... without
 * ... by (SDA,
 * ... registered with
 * ... in accord-
 * ... and in a
 * ... the direct or
 * ... of food

8-49 RODENTICIDES

* ... is a means of
 * ... other methods--
 * ... of buildings,
 * ... harborages,
 * ... rodent-free zone around
 * ... be used to prevent
 * ... into buildings.

(a) Approved Rodenticides

* The following rodenticides may be
 * ... 3-(4-Alpha-Acetonylfurfuryl)-4-
 * ... (Fumarin) and its
 * ... (Fumacil), Alpha-Naphthyl-
 * ... 2-[(p-Chlorophenyl)
 * ... 3-indandione (Chloro-

phacinone, Rozol), Diphacinone
 (Diphacin) and its sodium salt,
 2-[isovaleryl-], 3-indandione (PMP,
 Valone), 2-Pivalyl-1, 3-indandione
 (Pival) and its sodium salt (Pivalyn),
 Prolin, Red squill, Warfarin (3-alpha-
 Acetonylbenzyl)-4-hydroxycoumarin] and
 its sodium salt.

In general, rodenticides may not be
 placed in edible product departments
 until operations have ceased for the
 day and all uncovered products are
 removed from the area. Strict account
 must be kept of the location and number
 of stations in the area and the floor
 plan layout must be approved by the
 inspector in charge. Rodenticides may
 not be placed in dry salt cellars.
 They may remain in areas containing
 sealed, packaged meats, but care must
 be taken to place them so as to prevent
 contamination of the meat.

All labels must be registered with
 the Office of Pesticide Programs,
 Environmental Protection Agency.

(b) Rodent Baits

Bait boxes and fountains, tracking
 powders, and other rodenticides must
 be removed from edible product depart-
 ments before operations are resumed.
 All bait supplies must be stored in a
 separate place designated by the
 inspector in charge.

(1) Dry baits. Cereal, or other
 vegetable meals or flours may be mixed
 with one or more approved rodenticides,
 provided that they are first mixed
 with a green or blue dye.

Whole or cracked grains, or flours
 or meals pressed into cakes or pellets
 that do not have characteristics of
 food products, may be used without the
 green or blue dye. To help the rodenti-
 cide to adhere to whole or cracked
 grain, two ounces of melted animal or
 vegetable oil may be mixed with each
 five pounds of grain.

(2) Liquid baits. If prepared
 according to label directions, liquid

baits may be used in bait fountains, provided the solution has a distinct green color.

(3) Bait fountain. It must be similar to bottle-type containers used in poultry houses. Each fountain must be marked "rodent bait" and placed in a bait box.

(4) Bait box. It must be marked "rodent bait" and have a serial number and firm's or responsible individual's name. Each box must have sides, top and bottom closed, or capable of being closed or fastened, with openings only for rodent entrance and exit.

(5) Tracking powder. It may be used in all departments, provided it has a distinct blue or green color, processing operations have ceased, all exposed products have been removed, and its use does not create a nuisance. After the powder is removed, floors must be washed with an effective cleaning compound and/or rinsed with potable water to remove all evidence of the tracking powder before operations are resumed.

(6) Sticky boards. Board strips with extremely adhesive resinous material can be used to capture rodents. Since the adhesive does not contain rodenticide, board strips may be used in all departments provided their use does not create a nuisance.

8.50 RODENT EVIDENCE

When pests enter an establishment, certain eradication methods and chemicals may be used.

(a) Ultraviolet Light

"Black Lights" or ultraviolet lights may be used to determine evidence and possible sources of product contamination.

Such lights cause rodent urine stains to fluoresce. However, certain substances--sodium and potassium salts,

cleaning agents, etc.,--also fluoresce. Thus, fluorescence under ultraviolet light and without other evidence of rodent infestation is not sufficient.

(b) Immediate Action

(1) Suspension of operations. When rodent evidence is discovered in production or production-related area--processing room, ingredient storage area, cooler, or any area where meat or poultry product is accessible--the inspector shall stop operations and movement of any material into or out of the area, and shall require management to:

1. Examine all products, packaging materials, and containers for rodent damage or contamination.

2. Destroy or decharacterize rodent damaged or contaminated product, carcass, parts, packaging materials and containers, and any open dry ingredient container.

3. Remove accumulations of equipment, paper, or other debris providing harborage in involved area, and wash and sanitize all equipment.

4. Survey premises and outside areas; eliminate all suspected harborages (outside premises, maintenance areas, etc); close all possible rodent access points, and arrange all dry storage material to facilitate cleaning.

(2) Resumption of operations. The inspector may allow operations to resume after all actions are successfully completed.

8.51 CONTROL PROGRAM

(a) Minimum Requirements

An effective rodent control program includes:

1. Written designation and authorization of a qualified individual to assume responsibility for the program.

2. Sealing all openings or holes serving as possible entrance points.

3. Elimination of any harborage inside or outside the plant.

4. Use of bait boxes outside of processing areas where rodent activity is possible.

5. Weekly premises survey (inside and outside) to determine control effectiveness.

6. Contract with a recognized extermination firm or an effective plant program.

(b) Plant's Responsibility

Plant management shall submit or resubmit to the inspector a copy of the rodent control program, indicating actions taken or to be taken to prevent rodent problem recurrence, and shall fulfill all requirements of 8.51(a) within 5 days after deficiency is noted.

(c) Inspector's Responsibility

(1) Inspection withholding. The inspector shall review the plant's program to assure that corrective actions are taken, and shall send a report to the area supervisor. He shall withhold inspection, when all minimum requirements for a rodent control program are not implemented within 5 days, and shall report the action to the area supervisor.

(2) Inspection Suspension; Reinstatement. The area supervisor shall recommend inspection suspension when the rodent problem continues and management fails to take corrective actions.

RD shall suspend inspection when minimum rodent control requirements have not been met, or when there is evidence that the plant is unable to control rodents in production or production-related areas. He shall reinstate inspection when all requirements of this subpart have been met, as determined by a complete plant survey made under direction of Regional Office.

SPECIAL SANITATION REQUIREMENTS

Subpart 8-H

(Regs: M-308, 318; P-Subpart H,U)

Generally, bacteria grow slowly at or near freezing (32° F.), but multiply rapidly with increasing temperature; therefore, product and room temperature must be kept as low as possible.

8.54 RAW PRODUCT AREA

Midshift Cleanup

When temperature of processing areas is not maintained at or below 50° F., a midshift cleanup of equipment surfaces contacting product (trays, tables, chutes, belt conveyors, handtools, etc.) shall be required within 5 hours from start of operations, and at least every 5 hours thereafter.

Complex equipment (grinder, stuffers, etc.) will also be cleaned as above, unless (1) it is reused within 3 hours, and (2) product is processed (cooked, frozen, or dried) within 4 hours after its temperature rises to 50° F. If any above schedule is delayed by breakdown(s), product must be adequately refrigerated until normal processing is resumed.

Regardless of room temperature, all used equipment shall be cleaned and sanitized at least every 24 hours.

8.55 HEAT-PROCESSED PRODUCT AREA

(a) Management's Responsibility

Heat-processed products, that may be consumed with limited further processing, provide ideal media for food poisoning organisms.

Plant management is responsible for assuring acceptable sanitation standards for facilities, equipment, and

personnel to prevent product contamination and/or bacterial growth.

(b) Product Handling

Besides other requirements, this section applies to products that are heat processed at 140° F. or higher. Shelf-stable dried products and smoked pork items--dry salami, hams, bacon, etc.--are presently excluded.

Persons handling or preparing raw products shall not handle heat-processed products, unless they first wash and sanitize their hands and change garments.

Persons working with live animals, byproduct, or inedible product shall not handle heat processed product.

Management shall not allow persons with boils, open sores, other inflammatory abnormalities or dirty hands and fingernails to handle edible product.

(c) Handwashing

Employees shall properly wash and sanitize their hands upon entering or reentering heat-processed product areas, and after contacting possible materials (mechanical equipment, debris, etc.).

(d) Aprons

Employees' aprons shall be clean, readily identified and, when not used, hung in designated area.

(e) Product Storage, Temperature

Exposed heat-processed product shall not be stored in same area with raw product. Its internal temperature shall not be kept between 40° F. and 120° F. for more than 2 hours. However, large mass solid products may be placed into a 40° F. cooler before they are chilled to 120° F. Small mass solid products must be chilled before bulk packing, unless it can be demonstrated that product reaches 40° F. within 2 hours. With appropriate equipment, fluid and semifluid products can be chilled as specified.

(f) Midshift Cleanup

All equipment--tables, trays, vats, etc.--directly contacting heat-processed products must be thoroughly washed and sanitized at midshift. Such equipment must not be used interchangeably for raw and heat processed products unless completely cleaned and sanitized. Portable equipment shall be washed and sanitized in designated areas to prevent product or other equipment contamination.

When the same personnel cleans other departments, cleanup procedures should first be directed to heat-processed product areas.

(g) Microbiological Control and Monitoring

Official establishments conforming with all provisions of this section may be considered in compliance if they develop and implement an approved microbiological control and monitoring program (MCMP) in lieu of a midshift cleanup. The inspector in charge (IIC), in consultation with plant management, will evaluate and establish the degree of cleaning needed between consecutive shifts. A thorough cleanup will occur at the end of each production day.

(1) Approved program. An approved program must include:

(i) The establishment name and number, the program name, and the data control number, 220.

(ii) The control points that are critical to the operation of both the microbiological control and the microbiological monitoring parts of the Program. *

The plant must identify the critical control points in the sanitation program that it will use to assure adequate microbiological control. Similarly, the plant must also identify the critical control points that it will use to assure adequate microbiological monitoring *

program. In each critical control point, the plant will be responsible to its supervisor for how the sanitation program will be accomplished (i.e., how it will be monitored) and how it will be adjusted (e.g., how it will be modified) and how it will be developed of the program above is the regional office.

Program Development and Pre-approval. The IIC may be requested by the plant desiring to implement the program. The MCMP, a 30-day midshift cleanup to midshift test data and necessary program procedures, and specifications for the preliminary data obtained from the

Approval Period. The plant will operate the program for a period of 30 days. The evaluation of the program by the regional office will be completed, and if the plant is not satisfied, the plant may request in writing and may be given the opportunity to modify the program. The regional office will consult with the IIC and plant supervisor to satisfy a reasonable number of the plant's requirements for accomplishing the

program to operate the program. The modification of the program by the plant is subject to the request for approval. The IIC may recommend to the supervisor that the program be continued and that the plant be a thorough midshift

(ii) Monitor plant adherence to procedures. Evaluate program effectiveness and deviations, including frequent reviews of plant records.

(iii) Assure adequacy of their identification and investigation of potential problems (higher than normal counts).

(iv) Assure adequacy of their response when an assignable cause or a presumptive cause is found.

(5) Changes. Proposed revision to update and/or improve the program should be submitted to the regional office through the IIC.

(h) Termination of Program

(i) The official establishment may terminate the program at any time by returning immediately to a thorough midshift cleanup, followed by written notification to the regional office.

(ii) The IIC will consult with the circuit supervisor before returning the establishment to a midshift cleanup; (1) when the plant refuses to adhere to program procedures; (2) fails to use the monitoring to detect problems and adjust the program procedures; or (3) when basic sanitation is lacking.

Program Approval. After approval, the IIC shall:

Familiar with details of procedures.

ANTE-MORTEM INSPECTION

PROCEDURE

Subpart 9-A

(Regs: M-309, P-Subpart J)

9.1 PURPOSE

Ante-mortem inspection is to accept only animals (livestock or poultry) capable of producing products acceptable for use as human food. Such inspection removes from human food channels animals: (1) obviously unfit for human food because of diseases or abnormalities; (2) with diseases or conditions difficult to detect on routine post-mortem inspection (central nervous system disorders, chemical poisoning); (3) with zoonotic diseases (ornithosis, poultry erysipelas, etc.). It also prevents unnecessary contamination of slaughtering departments, and provides information on suspect animals for post-mortem inspection.

9.2 FACILITIES, EQUIPMENT, LOT

The establishment will provide adequate facilities, equipment, and necessary supplies, and will determine the number of animals (livestock or poultry) comprising a lot. Ante-mortem inspection shall be performed only on lots identified for slaughter by the establishment.

9.3 ASSISTANCE

Plant management shall provide sufficient employees to move, segregate, restrain, identify, and dispose of animals as requested by the inspector.

9.4 INSPECTION DAY

Ante-mortem inspection must be made by an MPI employee--veterinarian, or inspector under veterinary supervision --before daily slaughter operations begin, except for low volume plants (see section 9.8), and according to regulations and/or instructions issued by the Administrator.

Subsequent inspections. These shall be made, as necessary. Inspectors assigned to small plants may have to stop post-mortem inspection procedures to perform ante-mortem inspection.

9.5 OBSERVATION

(a) Livestock

Cattle, calves, swine, sheep, goats, horses, or other equines shall be observed when at rest and in motion.

(1) At rest. The inspector shall observe cattle, large calves, boars, stags, sows, horses, or other equines from outside the pen; small calves, butcher swine, sheep, and goats from inside.

(2) In motion. All animals shall be observed on both sides while in motion.

A mirror may be used to view the opposite side of each animal.

Excitement of animals should be avoided.

(b) Poultry

Poultry shall be observed while they are in coops or batteries before or after removal from truck(s).

9.6 SEGREGATION

Animals (livestock or poultry) showing signs of abnormalities or

diseases shall be segregated into designated (suspect) pens or coops for examination by an MPI veterinarian. Alternative (Livestock). Plant management may elect to use an alternative procedure, provided (1) facilities and volume of operations are suitable, as determined by area supervisor; (2) all abnormal animals are segregated; and (3) all animals (normal and abnormal) are held until examined by the inspector.

The inspector must (1) examine all animals found normal by the establishment while they are "at rest", (2) select 5 to 10 percent of such animals from several lots, and observe them on both sides while in motion; (3) examine--at rest and in motion--each segregated abnormal animal and tag any suspect.

Plant failure to segregate all abnormal animals and to hold all animals for inspection will require regular procedures

9.7 IDENTIFICATION; CONTROL (LIVESTOCK)

Adequate identification and control over inspected animals shall be established.

(a) Report; Certification

Animals shall not be removed from pens and sent to slaughter until a report (pen card), certifying that inspection was performed, is delivered to the inspector assigned to post-mortem inspection.

Such report shall include date, species, number of animals, breed, time of inspection, lot and pen number, and inspector's signature.

(1) Animal-report comparison.

Throughout the day ante-mortem certification reports should be compared with number of animals brought to slaughter to assure that all receive ante-mortem inspection.

(2) Report file. Ante-mortem inspection reports shall be filed in the inspector's office for one week.

(b) Variation

To accommodate small, large, or unusual operations, modified systems may be approved by area supervisor provided they assure identification and control over inspected animals

9.8 DELAYED SLAUGHTER (LIVESTOCK)

When ante-mortem inspection cannot be done on the day of slaughter, low volume plants (only) may slaughter--not later than the following morning--animals inspected late on the preceding afternoon, provided:

1. The number of animals does not exceed that which can be slaughtered and chilled at the plant in one day.

2. Preoperative sanitation inspection of the slaughtering department can be done simultaneously.

3. Animals tagged "U.S. Suspect" are slaughtered in the inspector's presence.

4. An identification and control system over inspected animals is established as follows: (a) self-locking or sealing tags, or other acceptable devices are used, kept in the inspector's custody, and applied in his presence during ante-mortem inspection; and (b) a tattoo or other suitable device is used on mechanically dehaired swine.

9.9 SAFETY

The inspector shall be in a safe place during ante-mortem inspection. He must use the required walkway platform for horses or other equines

9.10 INHUMANE HANDLING (LIVESTOCK)

The inspector should caution management against inhumane practices resulting in injury or unnecessary pain to animals. If such practices are

- * not promptly corrected, he should take
- * the actions required by section 313.50
- * of the regulations.

DISPOSITION

Subpart 9-B

(Regs: M-309; P-Subpart J)

9.13 NORMAL ANIMALS

Livestock or poultry can be passed for regular slaughter when ante-mortem inspection does not reveal diseases or abnormalities.

9.14 SUSPECTS

Animals (livestock or poultry) with signs of abnormalities or diseases shall be restrained and closely examined by an MPI veterinarian.

When inspection of abnormal animals reveals an abnormality or disease requiring a more detailed post-mortem examination to determine carcass disposition, such animals shall be passed for slaughter and handled as "suspects."

(a) Livestock

(1) Suspect tag. Suspects shall be identified with a "U.S. Suspect" tag and slaughtered separately.

(2) Tattoo (swine). Suspect swine, if mechanically dehaired, must also be identified with tattoos to assure identification through dehairing.

(3) Form MP 402-2. This form (card) shall be completed for each animal tagged and shall be given to the post-mortem inspector before slaughter.

Exception! A separate form is necessary for each bovine with epithe-

lioma of the eye, actinomycosis, or actinobacillosis. However, affected animals shall be segregated into separate lots and condition and number of animals shall be recorded on the form.

Although only one form is completed for each different condition in a lot, such animals must be handled as suspects. When slaughtered, they must be individually identified with a multi-sectioned "U.S. Retained" tag, and recorded as suspects on Forms MP 403 and 403-6.

(b) Poultry

Poultry with signs of abnormalities or diseases--dirty, ruffled feathers; swollen sinuses and/or wattles; eye and/or nostril discharge; off-color diarrhea and pasty vent; swellings; lameness; ascites; cachexia; CNS disorders (wry neck), etc.--shall be handled as suspects.

Each suspect may be retained and slaughtered at the end of the day's operation, if practicable and adequate facilities are available, or all poultry in the lot may be slaughtered and handled as suspect.

In either case, line speed shall be reduced to allow adequate post-mortem inspection.

9.15 CONDEMNED

When ante-mortem inspection of abnormal animals (livestock or poultry) reveals a dying condition, a disease or condition requiring carcass condemnation on post-mortem inspection, or a disease or condition requiring further observation or treatment, such animals must be identified as "U.S. Condemned" and must be withheld from slaughter.

(a) Livestock

Condemned animals must be tagged "U.S. Condemned," and must either be promptly killed by plant employees and disposed of as required, or must be held for observation and/or

treatment in separate, identified facilities. Following recovery, they may be reexamined by an MPI veterinarian. If normal, they may be passed for slaughter.

(b) Poultry

Condemned poultry shall be humanely slaughtered. A suggested method is pulling the head downward and sharply backward, leaving the skin intact. This results in separation of the first neck joint, spinal cord, and blood vessels. Floor and equipment contamination should be avoided.

Condemned birds must be counted, weighed, and reported on MP Form 514, Poultry Inspection, Lot Tally Sheet.

9.16 DOA'S

Dead-on-arrival (DOA) carcasses shall be identified and disposed of as required by the regulations and Part 14 of this Manual.

Livestock DOA'S shall be tagged "U.S. Condemned."

Poultry DOA'S shall be identified, counted, weighed, and the number reported on MP Form 514.

9.17 ABNORMALITIES; DISEASES

(a) Livestock

* (1) Downers. All downers, including
* those showing signs of trauma, shall be
* examined by an MPI veterinarian. Nature
* and extent of the examination shall be
* sufficient to determine whether they
* should be condemned, passed for immediate slaughter as suspects, or held for
* further observation. Carcass disposition for those passed for slaughter
* shall be based on ante- and post-mortem
* findings and, when necessary, on laboratory results.

(2) Emergency Slaughter. Sick, dying, or animals treated with a drug or chemical and presented for slaughter before the required withdrawal period are not

covered by the emergency slaughter provisions in the regulations (M-311.27).

(3) Abnormal calves. Immature, diseased, weak, and uncoordinated calves must not be slaughtered for human food.

(4) Eye missing. Any bovine with an eye or associated structure missing shall be handled as suspect.

(5) Escaped animals; control. Tranquilizers are not approved for use on livestock destined to slaughter. If a tranquilizer was used, the veterinary medical officer will consult STS-RP through channels for handling and disposition of involved animal(s).

(6) Proteolytic enzyme. Only normal cattle can be injected with an enzyme solution.

Treated animals must be slaughtered between 2 to 30 minutes after injections.

Cattle showing any injection reaction--salivation, incoordination, dyspnea, blood tinged froth at the nose and/or mouth, edema and/or hyperemia of the throat area, etc.--shall be examined by an MPI veterinarian. Upon recovery, such animals may be released for slaughter.

(7) Brucellosis reactors. Identity of these animals must be maintained. Any information, including animal's disposition, shall be recorded and sent to Federal and State Agencies responsible for disease control and eradication.

To minimize the risks associated with exposure to such animals, the inspector should take the following precautions:

a. Encourage the establishment to segregate and handle brucellosis reactors as separate lot(s).

b. Avoid cuts and their contamination (hand washing, prompt first aid, etc.). Use care in making necessary incisions.

c. Avoid contamination of eyes with body fluids of carcasses and unnecessary contact with most likely infected tissues.

d. Unless necessary for carcass disposition, do not incise pelvic viscera, mammary glands, and the supramammary, inguinal, and iliac lymph nodes.

e. Obtain prompt medical evaluation of any febrile illness and inform the physician of possible exposure to brucella organisms.

(8) Tuberculosis reactor, suspect, exposed. Before ante-mortem inspection is performed, the animal must be identified by establishment personnel as a "reactor," "suspect," or "exposed." This information is on accompanying VS Form 1-27 or similar form. To maintain control over infected herds, some "exposed" animals may be identified with a reactor tag and/or "T" brand.

The reactor number on the metal ear tag should be recorded. Animals without tag, but otherwise identified, should be described by recording data such as color, breed, sex, horns, estimated weight, brand marks, etc.

Condemned or DOA animals shall be given a complete post-mortem examination in the inedible department.

(9) Hyperimmune horses. Horses hyperimmunized against human pathogenic microorganisms--meningococci, streptococci, etc.--and those used for producing gas gangrene, tetanus, or diphtheria anti-toxins must not be slaughtered for human or animal consumption.

(10) CNS disorders. Animals with central nervous system disorders--depression, drowsiness, weakness, coma, licking, staggering, circling, muscular tremors, etc.--shall be condemned. Such signs could be indicative of sporadic bovine encephalomyelitis, infectious thromboembolic meningo-encephalitis, and various poisonings (metal, salt, plant, fluorine, pesticide, etc.).

(11) Rabies. Animals showing symptoms of rabies must be condemned.

Animals bitten by a rabid animal must not be slaughtered for food purpose for at least 8 months.

(12) Vesicular diseases. Animals with a vesicular condition must be held and reported immediately (by telephone) to nearest VS office.

Federal and State officials of animal disease control will make the final diagnosis and instruct on disposition and facility disinfection.

(13) Myiasis. Animals with wounds infested with maggots must be segregated and maggot specimens taken to identify possible screwworm infestation (21.4(e)).

(b) Livestock-Poultry

Research animals. Experimental or research animals shall not be slaughtered unless authorized by FO, Washington, D.C.

(1) Drug withdrawal. Animals that received a drug or chemical and are presented for slaughter before the required withdrawal period is completed must be withheld from slaughter until such period elapses.

(2) Poisoning (drug, chemical). Animals with drug or chemical poisoning signs shall be withheld from slaughter.

Regional Director and FO shall be immediately notified as to history and number of animals, signs, and other pertinent information.

(c) Poultry Reportable Diseases

(1) Report. In case of a suspected reportable disease, inspector in charge shall (1) immediately notify plant management, (2) obtain flock's history, and (3) inform (by telephone through area supervisor) appropriate Federal and State officials.

(2) Slaughter suspension. When a flock slaughter is initiated and

subsequent live poultry are found with a reportable disease, the flock shall be withheld until history is obtained, Federal and State authorities are notified, and action is initiated. This may require flock quarantine and treatment.

(3) Removal. Poultry with or suspected of a communicable disease may be removed from the plant at owner's request. However, they are subject to Federal and State laws on disease control and eradication.

(4) Ornithosis. Signs of this disease are indistinguishable from those of C.R.D., Newcastle, and other poultry diseases.

Affected poultry may show listless, drooping wings, ruffled and dirty feathers, greenish-white fecal accumulations around vent, shivering fits, weakness, imbalance, etc.

The first birds showing suspicious signs shall be observed on the eviscerating line for air-sac involvement, pericarditis, and/or plastic exudate commonly found in ornithosis or other communicable diseases.

Inspectors assigned to post-mortem inspection must notify the inspector in charge of these findings.

Inquiry may reveal a history of symptoms that have been frequent in the flock at the farm, and/or influenza-like symptoms that have been observed in persons handling the flock.

Live poultry with signs of ornithosis and those showing lesions of such disease on post-mortem inspection shall be condemned.

Poultry released from quarantine may be slaughtered and judged on post-mortem inspection under combined supervision of appropriate officials.

SLAUGHTER AND DRESSING

Subpart 10-A

Regs: M-390, 391; P-Subpart 1)

Adequate slaughter and dressing procedures result in wholesome product. All procedures shall be conducted to prevent or minimize possibilities of carcass and/or product contamination.

HUMANE SLAUGHTER

10.1 LIVESTOCK

The Humane Methods of Slaughter Act of 1978 makes humane slaughtering and handling mandatory for all cattle, sheep, swine, goats, horses, mules, and other equines slaughtered under inspection. It dictates that animals be made insensible to pain (unconscious) before they are shackled, hoisted, or cut. The law exempts ritually slaughtered livestock from the requirements of the Act.

(a) Handling Requirements

Animals shall be handled humanely in the livestock pens and while being driven to and from the pens. Driving shall be accomplished with a minimum of excitement and discomfort.

Downer animals shall not be dragged while conscious. The animal should be stunned before moving it. Section 313.50 of the regulations specifies actions the inspector must take when he observes inhumane handling and stunning methods being used.

(b) Electric Stunning

(1) Procedure. Electric stunning devices produce anesthesia in the animal by conveying an electric current through the brain. Uniformly placed electrodes and adequate electric exposure produce anesthesia.

To ensure that electrically stunned animals do not regain consciousness during bleeding, they should be stuck within 30 seconds after stunning.

(2) Animal crowding. Crowding and stunning an excessive number of animals should be avoided. It may result in animals slipping, falling, becoming badly soiled or injured.

(3) Observation. The inspector should frequently observe stunning procedures and determine whether livestock are properly anesthetized before shackling and bleeding.

* * *

(c) Recording Violations

Whenever a violation of the Humane Methods of Slaughter Act occurs and operations are stopped, the inspector in charge shall notify plant management of the reasons for taking action. If the situation is corrected and the problem resolved, operations may resume. Send a written report to the Area Supervisor containing the following information:

1. Nature of violation.
2. Who in plant management was notified.

- * 3. Length of time operations
- * stopped.
- * 4. Correction made or nature of
- * assurances given.
- * 5. Indicate if problems were
- * resolved locally or were referred to
- * higher supervision. The Area Super-
- * visor shall maintain a file of the
- * reports received.

* * *

PROCEDURES

10.3 CATTLE

(a) Animal Washing

If washed, cattle should be dry or dry enough to prevent dripping when stunned.

(b) Bleeding

Animals should be bled as soon after stunning as possible to utilize post-stunning heart action and to obtain complete bleeding.

(1) Landing area. The "dry" landing area, where stunned animals are discharged from the knocking box, should be kept clean and as dry as possible.

Bleeding should not occur in this area unless it's impractical from a facility viewpoint. In such case it must be cleaned after each carcass by squeegeeing and/or washing.

(2) Blood Collection. Blood from condemned carcasses must not be saved for edible purpose.

(i) Procedure. Blood, saved for edible purpose, must be collected without contamination. An acceptable method is placing a funnel inside skin edges of stick wound and against the carcass.

(ii) Identification. Carcass and blood must be kept identified until carcass inspection is completed.

(iii) Defibrination. Blood clotting may be prevented with approved anti-coagulants or mechanical defibrination. The latter must be done with suitable metal beaters (not with hands) cleaned and sanitized after each lot of blood.

(c) Carcass Spacing

Carcasses shall be spaced from bleeding area to last inspection point to prevent unskinned carcasses contacting and contaminating skinned carcasses or parts.

(d) Carcass-Head Identification

Carcasses and corresponding heads shall be identified before head removal by duplicate numbered tags, securely attached by plant employees.

(e) Head Handling

(1) Removal. Heads shall be removed soon after skinning without contamination from contacting carcasses, floor walls, fixed objects, or otherwise. Rumen content contamination may be prevented by pulling the head sharply to one side as it is cut.

Horns and hide pieces must be removed before head washing.

(2) Washing. Heads shall not be stored on or contact floor of head washing cabinets. They shall be washed in approved compartments or areas controlling water splash and preventing contamination to adjacent heads or carcasses.

Oral and nasal cavities shall be thoroughly flushed before washing outer surfaces.

Heads presented for inspection must be free of hair, hide pieces, ingesta or other contamination.

(f) Esophagus Rodding and Tying

Esophagus (weasand) shall be roddeed or otherwise separated from surrounding tissues to prevent carcass contamination.

Rodding is required when abdominal viscera are removed separately from thoracic viscera.

"Rodding" consists of positioning the looped end of a metal rod around the esophagus and pushing it through the thoracic cavity up to the diaphragm. This separates the esophagus from the trachea and lungs and permits its removal, through diaphragm and thoracic cavity, without breaking during evisceration.

To prevent escape of rumen contents and carcass-viscera contamination, esophagus shall be effectively rodged and tied before evisceration.

(g) Skinning

(1) "Bed" system. After head removal, carcass may be placed on skinning bed. Carcass and head skin must be handled without neck tissue contamination. This may be done by leaving the ears on the hide and tying the head skin (except in "kosher" dressing). Tying may be omitted, if each carcass is dropped without exposed tissues contacting the floor.

Feet must be removed before carcass is otherwise cut. They may be separated by one transverse cut through hide and joint, or by cutting the hide medially and laterally along the shank, leaving a hide flap, and then separating the joint.

Except for sticking and starting skinning procedures, skin should be cut from inside outward to prevent carcass contamination with cut hair.

Hair side of hide should be carefully rolled or reflected away from carcass during skinning.

Use of pritch stick must not result in carcass contamination.

When carcass is moved from skinning bed, exposed parts must not contact floor or fixed objects. Floor of this area must be cleaned after each carcass by squeegeeing or washing and, if contaminated with pus or other septic material, by sanitizing.

Washing must not result in splash to carcasses, product, or equipment.

(2) "On-the-rail" system. Skinning should begin with hind shanks and proceed downward, reflecting the hide away from the carcass. Lower skinning should begin after carcass passes common contact points (high skinning platforms). To prevent shank contamination, front feet may be removed after brisket and foreshanks are partially skinned.

(h) Udder and Penis Removal

Lactating udders shall be removed preventing soilage of carcass, facilities, or equipment. Any such carcass contamination must be immediately trimmed; contaminated facilities or equipment must be washed.

Penis (pizzle) must be removed without carcass contamination with urine. In bed layouts, penis must be removed while carcass is at half-hoist.

(i) Brisket Opening

After the hide is reflected from the midline, the brisket is opened to facilitate removal of thoracic viscera. In bed layouts, it is done while the carcass is on skinning bed; in on-the-rail layouts, it is deferred until the hide is removed.

(j) Tail Skinning

Tail shall be skinned without carcass or tail contamination. When a clamp is used, the tail tip is secured after skin removal. When the tail skin is removed with the hide by mechanical puller, the tail must be secured or otherwise arranged to prevent carcass contamination.

Since tails are highly contaminated with foreign materials--manure, urine, etc.--hands and tools must be washed as often as necessary.

(k) Bung Dropping

Bung must be dropped as a final part of rumping procedure. The perineal skin shall be reflected laterally over

the sphincter intact. The tie is made around the anus, and into the pelvic cavity. It must be done with a clean

(d) Esophagus tie

For evisceration, rectum shall be tied. This includes bladder's neck and to prevent urine and fecal leakage.

Exception: When an establishment has the perineal area and handles the carcass without carcass and/or viscera contamination, area supervisor may accept omission of such tie, provided urinary bladder is removed and disposal of it start of evisceration.

(e) Hide Spreading

Hide shall not be spread in slaughter area for plant inspection or other use.

(f) Evisceration

(1) Carcass opening. Contaminants shall be trimmed from midline before opening abdominal cavity. Such opening must not result in carcass and/or viscera contamination.

(2) Viscera removal. It requires skillful knife work in cutting and pulling free abdominal viscera from carcass attachments without cutting or breaking stomach or intestine.

While accidental contamination may be expected, careless techniques are prohibited. Contaminated carcasses must be trimmed.

(3) Urinary bladder. It must be removed without urine spillage on carcass, viscera, or equipment.

(4) Uterus. Gravid and/or infected uteri must be removed without contaminating carcass and/or viscera with uterine fluids. In viscera truck-type operations, uteri and contents should be removed from the area in leak-proof containers or trucks after inspection.

(5) Esophagus and intestine tie. If the gastro-intestinal tract is cut,

esophagus and small intestine must be tied twice at their junction with the stomach. Ties must be about 4 inches apart and contents of intervening part stripped before second tie is made. This prevents content spillage when such parts are cut between ties.

If stomach or omental fat is saved for edible purpose, such ties may be required during viscera separation to prevent contamination.

Variation: The inspector in charge may accept variations with above if required purpose is fully accomplished

(g) Splitting

To prevent spreading contamination by saw or cleaver to other surfaces, bruises, grubs, and grubby tissue or contamination shall be removed from midline area of back before splitting.

Neck and foreshanks must not contact the floor when splitting is done at half-hoist.

(h) Trimming

All required carcass trimming must be done in approved areas and without interfering with inspection.

Large blood clots and bruised tissue must be removed.

(i) Carcass Washing

After trimming and inspection, all carcasses shall be properly washed without bunching. Washing should proceed from the carcass top downward to remove any possible contaminant from clean areas. Hair, dirt, or other accidental contamination must be removed without splash onto carcasses or product. Warm water may be used.

Neck pinning must be done after washing so that contaminants are not trapped in the neck folds.

Brushes. Fountain type brushes must not be used for washing carcasses or parts.

(j) Shrouding

After thorough and complete washing, carcasses may be shrouded.

Shrouds. See section 8.30(b)(8).

(s) Feet for Edible Use

Cattle or calf feet may be saved for edible purpose, provided: (1) they are identified until the carcass is inspected, (2) they are handled and washed (individually) without cross-contamination and splash, (3) when scalded and dehaired, at least 1 inch of exposed joint is removed from the proximal end as final cleaning procedure, and (4) they are properly branded and/or labeled before shipping.

10.4 CALVES**(a) Warm Skinning**

This method is similar to cattle skinning. It does not require hide washing and results in clean carcasses. Proper shrouding prevents carcass shrink and preserves carcass "bloom."

(b) Cold Skinning

(1) Overhead rail. "Hide-on" or "cold-skinned" calf carcasses shall be dressed while suspended from an overhead rail.

(2) Initial washing. To assure thorough hide cleaning, enough water (volume and pressure) shall be available.

"Hide-on" carcasses must be free of dirt, dandruff, and manure before heading or carcass cutting.

(3) Sanitary dressing. Management is responsible for handling all carcasses and parts sanitarily. Besides "carcass spacing" requirements outlined for cattle, management shall furnish mechanical means of positively separating unskinned carcasses, if otherwise unable to prepare them sanitarily.

Insanitary hide-on or cold-skinning operations are prohibited.

(4) Skin abnormality. Dirty skins and those from carcasses with bruises, grubs, lice, or other abnormalities shall be removed during slaughter.

(5) Final washing. Final washing of "hide-on" carcasses is limited to body cavities, neck, neck hide, and fore-shank areas.

(c) Head Handling

Same as for cattle.

Exception! Establishments may save tongues without skinning heads, provided such heads are washed, supra-pharyngeal lymph nodes are exposed for inspection, and tongues are individually washed.

(d) Bung Handling; Evisceration

Handle large calves as cattle and small calves as sheep.

(e) Large Calves

Dressing and facility adequacy must be considered when "large calves" are proposed to be slaughtered.

Rail installations must prevent carcasses and heads from contacting facilities or equipment.

(f) Feet for Edible Use

Same as cattle.

10.5 SHEEP AND GOATS**(a) Skinning**

Pelt removal begins with hind legs. Since it requires extensive hand-to-carcass contact, plant employees must prevent carcass contamination from dirty hands, knife, or pelt. Hands and knives must be kept clean.

Paper or other sanitary protective material should be used on thighs of long wool or very dirty carcasses.

(1) "Clearing out." During this procedure about 1/2 inch of skin, without wool or hair, should be left around the anus.

(2) Pelt puller. When a pelt puller is used and female carcasses are raised to a horizontal position, urine leakage may occur. To prevent it, forceps

over the vulva or other acceptable means may be used.

(b) Head Handling

(1) **Scalping.** To prevent contamination, heads should be skinned after the pelt is loosened from the carcass. Horns should be removed during scalping.

(2) **Unskinned heads.** Tongues may be saved for edible purpose without skinning the heads, provided: (1) unskinned heads are not removed from carcasses, or they are properly identified until inspection is completed; (2) they do not cause carcass, product or equipment contamination; and (3) tongues are individually washed.

(3) **Head washing.** Nasal and oral cavities shall be flushed before heads are placed on workup tables or in chutes.

(c) Carcass Washing

Overall carcass washing shall be done before any cut is made for evisceration. To prevent the rectum from being filled with water, the tail should be held down during washing.

(d) Evisceration

To prevent the pelvic cavity from becoming filled with water, the bung must be dropped after washing. After opening the pelvic area, a plant should grasp and firmly hold ; neck and (dropped) bung until they are out of body cavity. He should then strip the large intestine section immediately preceding the bung, remove bladder and bung, and detach and place viscera in an inspection pan.

To prevent contamination, intestines saved for casings should be stripped and/or tied at ileo-coecal junction before their removal from the table.

(e) Bile duct cut

Before inspection a plant employee

must transversally cut the main bile duct (See Fig. 10.1).

10.6 SWINE

(a) Bleeding

Sticking must assure complete bleeding and must prevent shoulder wounds.

(b) Scalding

Live or incompletely bled animals shall not be scalded.

Carcass scalding is affected by water temperature and circulation, time, number and type of carcasses in tank.

Water temperature should be adequate to get clean carcasses. Although it may vary with facilities, a temperature of 138° to 140° F. is usually satisfactory.

Carcasses should remain in scalding tanks long enough to loosen hair. Excessive time or temperature results in carcass cooking.

(c) Dehairing

Adequate dehairing depends upon equipment, water temperature and number of carcasses in the machine.

(1) **Recirculated water.** In spray-type dehairing machines water may be recirculated in the first two thirds of the system. However, clean water must be used in the last third or at least in the last six feet.

(2) **Rosin.** Nostrils and mouth must be closed (by rubber bands or otherwise) before carcass dipping.

(3) **Singeing; polishing.** Singer should have an automatic cutoff and starter switch to prevent carcass burning when chain stops.

When a polisher is used, it should be equipped with water sprays.

(4) **Gambrelling.** Hind feet shall be free of hair and scurf before gambrelling.

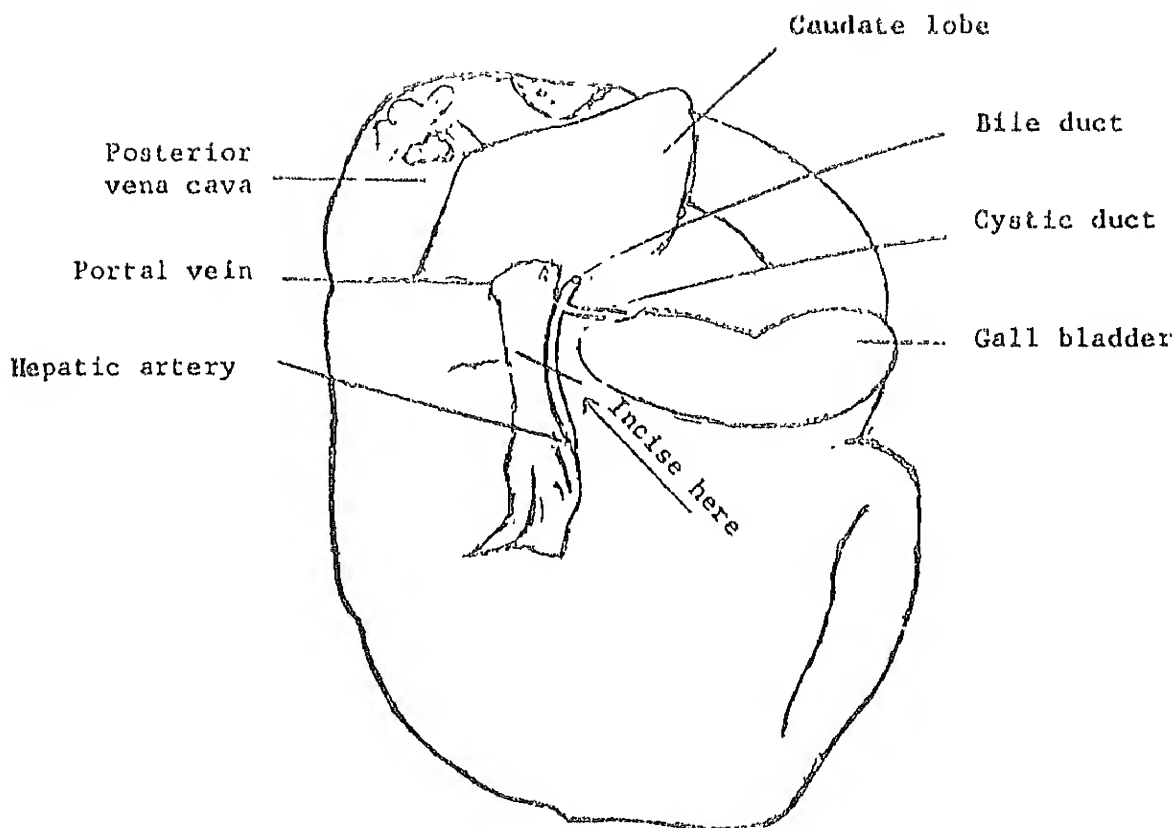


Figure 10.1

(5) Shaving. Complete removal of dirt, hair, scurf, and rosin must be done before heading.

To prevent contamination of cut surfaces, all carcasses must be clean before any cut is made for head dropping or evisceration.

After heading or other carcass cutting, hair, scurf, etc., shall be removed by trimming.

(d) Skinning

*-(1) Skin washing. Sprinkling live hogs in pens for relief in hot weather, effective electrical stunning or washing alive or dead before skinning is permitted, provided skins are sufficiently dried to prevent wash water dripping onto skinned or cut surfaces of carcass during skin removal.

(2) Spacing. To eliminate cross contamination carcasses shall be

spaced after bleeding before making any incision (legging, skin opening, transfer, gambrelling, etc.) and remain spaced until inspected and clean. *

(e) Head Handling *

(1) Presentation. All heads shall be presented with cervical lymph nodes readily available for inspection. *

(2) Scalded heads. Heads with skin on shall be thoroughly cleaned before dropping and removal. *

(3) Skinned heads. Skinned heads shall be detached from carcass after dropping and thoroughly cleaned prior to inspection. *

(4) Intact (market) heads. Oral and nasal cavities of heads sold intact shall be thoroughly flushed. *

opening shall be washed with water before slaughter. Such spraying must not result in water dripping on exposed carcasses and/or parts during skinning.

(b) Identification

Heads and carcasses shall be identified by duplicate numbered tags. White and gray horses shall be kept identified (after hide removal) until inspection is completed.

(c) Head Handling

Heads shall be removed immediately after head skinning.

Hide and external ear canals should be removed before nasal and oral cavities are flushed and head surfaces thoroughly washed.

(d) Contamination Prevention

Exposed carcass surfaces should not contact floor or fixed objects during dressing.

Urine contamination of carcass and viscera must be prevented.

(e) Dropping Shoulders

Axillary and subscapular spaces of white and gray horses shall be exposed by removing overlying tissues (dropping shoulders).

(f) Withers Topping

To avoid contamination of withers and surrounding area, the upper third of spinous processes of eight thoracic vertebrae (2-9) shall be removed and placed on viscera inspection pan before carcass splitting.

(g) Carcass Washing

Due to the high glycogen level, skinned carcasses exhibit strong adhesive properties and should be washed as soon as possible after inspection. They should not be left unwashed during break and lunch periods.

Reproductive organs. Penis and testicles shall be removed without contamination of carcass, equipment or personnel.

Washing. Skinned carcasses. Bone saws shall be washed from carcass after skinning and dressing. Necks may be washed with leaf and scrap fat.

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*10.7 HORSES AND OTHER EQUINES

* * *

(a) Spraying Before Slaughter

To control loose hair, abdomen, legs,

Change 75-1

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10.8 POULTRY

(a) Bleeding

Contamination prevention. Blood must be prevented from contaminating food products.

To avoid product contamination from blood, scald water or feathers, slaughter and roughing should be done in rooms or areas adequately separated (by distance or otherwise) from pinning and finishing operations.

(b) Scalding; Overflow

Poultry shall not enter scalding tanks while still breathing.

Scalders should have a minimum overflow of one quart of water for each bird entering them. It should be increased, if necessary, to keep scald water reasonably clean.

Hock or neck scalders require sufficient overflow for sanitary processing.

(c) Defeathering

All carcasses shall be properly defeathered before inspection. Incompletely defeathered carcasses should not be hung on eviscerating line.

(d) Singeing

Vestigial feathers (hair, down), left by picking machines, may be removed by singeing, wax dipping, or other acceptable means.

When proper facilities are available, carcasses with hair may be singed on drip line after chilling.

(e) Delayed Evisceration

Uneviscerated carcasses may be temporarily held in tanks at transfer stations between picking and eviscerating lines, provided:

1. They are vented before being placed in tanks, crop feed is removed, and they are thoroughly washed (especially feet, mouth, and slaughter cut).

2. Tank water is kept reasonably clean, has continuous overflow and temperature below 65° F.

3. Chilling time, as required by regulations, begins when poultry enters the tank.

(f) Washing

All carcasses must be thoroughly washed after picking and before evisceration.

(g) Feet Removal

Feet shall be removed before inspection to examine hock joint and tendon sheath areas.

They may be removed on New York line before final wash, if facilities have baffles to protect hock joints from being washed.

Any variation shall be approved by area supervisor.

(h) Feet and Shanks for Edible Use

Poultry feet and shanks may be saved for edible purposes, provided:

1. Toenails and cuticle are removed just before carcass hanging on eviscerating line.

2. They are identified with the carcass until after inspection. Hock joint may be cut, leaving shank attached by a tendon or skin part, and feet dropped without interfering with inspection.

3. They are washed before chilling. This may be done by leaving them on the carcass until after final wash.

4. They are chilled to 40° F. or lower within 2 hours after removal from the carcass. If chilled with the carcass, regulation requirements shall apply. Any acceptable method of chilling poultry carcasses may be used. However, bulk-packed feet and shanks must always be chilled to 40° F. or less before packing, even when packing is followed by immediate freezing.

5. Unwholesome feet and shanks, and those of condemned carcasses, are condemned at inspection station.

6. They are properly labeled and labels are approved by STS-LP.

7. Procedures are approved by RD.

Note! Above instructions do not change requirements for feet exported to Japan or Hong Kong.

(i) Head Removal

Young chicken and waterfowl heads may be removed at any point between scalding and final washing of eviscerated carcass. Heads of other

poultry should be removed after inspection and before final washing.

(j) Evisceration

Adequate supervision by plant management is essential to sanitary eviscerating operations.

(1) Opening cuts. Opening cuts must be made without cutting intestinal tract and without carcass contamination.

Unnecessary cuts are prohibited since they result in carcass contamination during eviscerating procedures, and in excessive moisture absorption during chilling.

Separating thighs from rib cage results in pockets where tissue debris and/or water gather during carcass washing and chilling.

A long cut between vent and tail (to remove vent) causes water to collect between back and skin.

(2) Bar cut procedure. A circular cut is made around the vent. Initial "half-moon" cut between tail and cloaca (Fig. 10.2) may be made on either 2- or 3-point suspension.

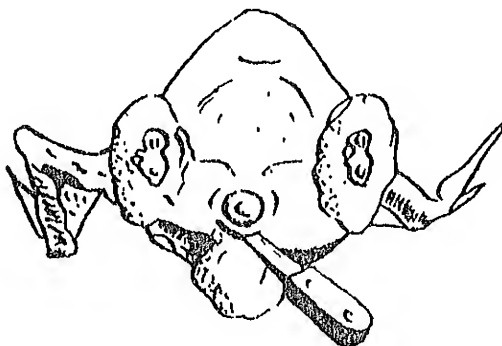


Figure 10.2

After carcass is rehung to a 3-point suspension (if the 2-point is used), with forefinger hooked under cloaca and thumb placed over natural opening to prevent feces escape (Fig. 10.3), remaining attachments--including the

two ureters (cords) extending from kidneys to cloaca--are cut in a circular motion with ball point scissors or short knife.

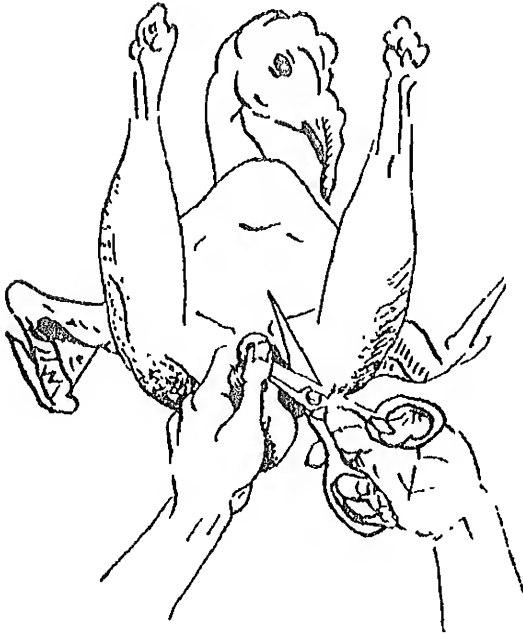


Figure 10.3

With light pull, cloaca is removed and about 4-6 inches of large intestine (Fig. 10.4) is drawn down from vent opening and milked out under cold water sprays.

Such sprays shall be installed and operated so that water or foreign material will not enter the carcass. Water sprays are not allowed between this point and inside carcass washer.

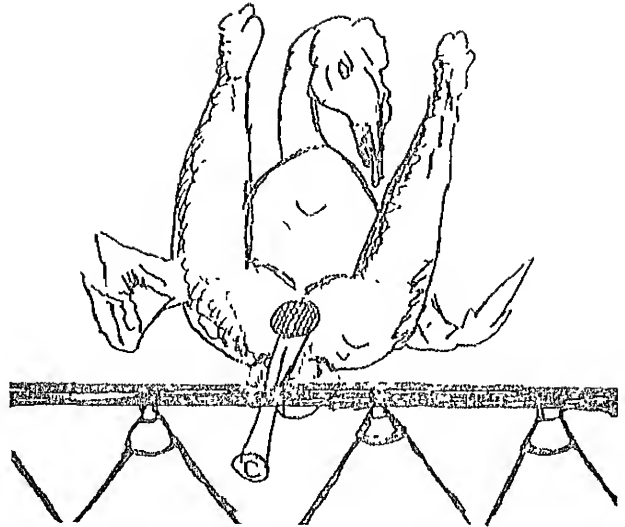


Figure 10.4

A transverse cut is made (Fig. 10.5) without cutting the intestine. Such cut shall be no longer than necessary to allow proper drawing and inspection.

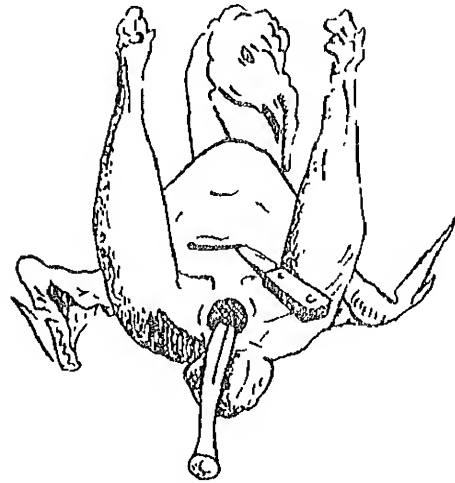


Figure 10.5

the cloaca is carefully closed, the abdominal cavity is closed with the air strap (Fig. 10.6). The carcass is then suspended outside the processing area by 4-6 inches of large wire to prevent cloaca refill.

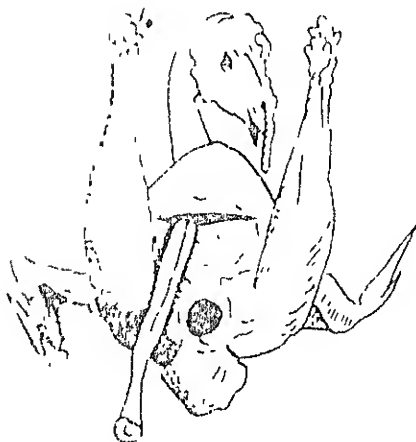


Figure 10.6

The abdominal viscera--heart, liver, gizzard, etc.--are drawn and adequately presented for inspection either hung by their attachments or placed on inspection conveyor below the carcass.

(3) Drawing. Drawing should be adequate. Careless drawing may result in torn thigh areas.

(k) Viscera Removal

(1) Giblets. Removal and trimming of giblets (heart, liver, gizzard) should be done without carcass or viscera contamination.

(2) Gizzard; intestine. Gizzard may be removed by cutting the esophagus at a point 1/2 to 1 inch anterior to the proventriculus (Fig. 10.7) and by trimming away and allowing the intestine to drop into the water-flushed disposal trough.

Gizzard opening and content removal should be done without contaminating

outer surface and attached fat. All mucosa and contaminated tissues must be removed.

(3) Ovaries. Only diseased ovaries or those in "cluster" or "maturity" stage (visible ova) need be removed from young poultry.

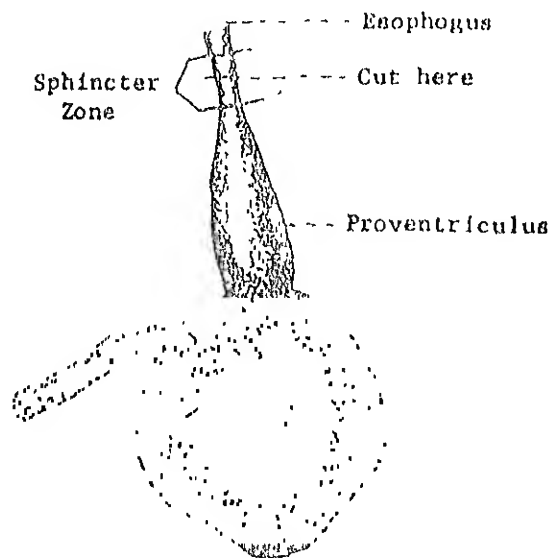


Figure 10.7

(l) Final Washing

To enable the final washer to effectively flush blood and tissue debris from the carcass, water must drain freely from body cavity.

Water trapped in body cavity, before or after chilling, affects moisture absorption and product weight.

(m) Unacceptable Carcass; Rework

Carcasses not meeting RTC requirements, except for hair when singeing is done on drip line, shall be removed by plant employees at end of line and shall be promptly reworked.

CHILLING OF POULTRY

Subpart 10-B

(Regs. P-Subpart I)

To prevent bacterial growth and product spoilage, all poultry carcasses should be promptly chilled after eviscerating and washing. Chilling procedures should be as required by regulations.

10.11 WATER AND ICE

(a) Chiller Filling; Overflow

Poultry chillers must be filled to the point of overflowing before birds are allowed entry. Required fresh water intake (1/2 gallon per bird for young chickens, etc.) must begin as soon as chilling system is filled with poultry. A continuous overflow from each chilling unit must be maintained, except when units are being emptied of poultry.

(b) Ice

Ice may be used to supplement part of water requirement in continuous chill systems at a rate of 8.5 pounds of ice for 1 gallon of water, provided compliance with section 381.66 (c)(2)(ii) of the regulations is attained.

(c) Equipment

Pumps, pipes, troughs, etc., may be used for returning overflow water to the chill system, provided they are of a sanitary type and are dismantled and cleaned daily.

(d) Heated water

While chilling is in progress, artificially heated water shall not be used in chilling system.

(e) Temperature; Thermometer

Automatic recording thermometers shall be checked for accuracy and adequately located for easy reading and safety of inspection personnel. The inspector must frequently check temperature of chilling water and chilled product during the day.

Temperatures of carcasses, giblets, and chill water shall be checked with hand thermometers. For fresh or frozen product, highest reading should be used to determine compliance.

A thermometer should be inserted into the thickest muscular portion of a carcass or part, and as near the center as possible of bulk-packaged product.

Temperature charts must be dated and filed in the inspector's office.

(f) MP Form 36

*

It shall be used for recording daily periodic temperatures of chill water, carcasses, parts, and giblets, and for recording water used in continuous chillers and, when applicable, in giblet chillers.

10.12 GIBLETS

All giblets shall be cooled as required in section 381.66(c)(5) of the regulations and packaged to avoid excess moisture. Containers shall be perforated to allow drainage. In case of containers that do not lend themselves to perforating, i.e., plastic cups, metal cans, etc., giblets shall be adequately drained before final packaging. If wrappers are used, they shall be applied closely and tightly around the giblets.

*

10.13 MOISTURE CONTROL

Poultry regulations specify allowable moisture absorption during washing and chilling. Absorption in excess of such limits is adulteration as defined by PPIA.

Part 10

responsibility
responsible for
the form, prior
to the test.

and draining, divide first weight into
difference and multiply by 100.

Example:

741.90 (ounces after chilling)
-670.67 (ounces before washing)

71.23

10.62%

670 67/71 230000

1. The test is
2. The test is
3. The test is
4. The test is
5. The test is
6. The test is
7. The test is
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10. The test is

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9. The test is
10. The test is

to pro-
visions,

(3) Responsible person. In plants
under inspection and grading services
and where a "floor inspector" is
assigned, test weighing may be done by
inspector and grader. If a "floor
inspector" is not present, the grader
shall assist the inspector by conduct-
ing the test or he may use plant per-
sonnel under his observation.

The inspector in charge is respon-
sible for testing in plants with only
inspection service. To avoid line
stops, he may use plant personnel
under his observation. In all cases
he must make required computations,
form distribution, and contact with
plant management.

(4) MP Form 549. This form shall be
used for recording moisture test
results (See Part 20).

(c) Procedure Change

Chilling procedures may be changed,
provided plant management:

1. Notifies inspector in charge in
writing, and completes MP Form 528, A
Moisture Absorbed by Poultry (supplied
by such inspector), including minimum
and maximum requirements on factors A
affecting moisture absorption.

2. Makes a 50-bird test immediately
after the change, and gives the inspec-
tor in charge test results.

3. Follows new procedures until
requirements of 1 and 2 above are met
and other procedures are established.

(d) Control Tables; Compliance

Control tables and requirements in
poultry regulations must be used to
determine compliance; this is based
upon a series of five consecutive
tests.

One such test may exceed the limits in Zone A of appropriate table without retaining the product. However, any test exceeding the limits in Zone B requires product retention until another test shows compliance.

When a 5-test series is completed on a poultry class or chilling system, a new series begins; however, when product is retained on test #5, such series begins after a test shows product compliance with Zone A.

Examples. Table 10.1 shows examples applicable to ice-pack chickens. However, by substituting class and allowed limits, they may be used for all classes.

(e) MPI Responsibility

(1) Inspector. The inspector shall:

1. Unless otherwise authorized by regional office, make at least one

10-bird test daily on each chilling system including ice-pack, cut-up, frozen, and/or consumer-packaged product.

2. Immediately compute test results, and contact plant management concerning noncompliance.

3. Maintain moisture control file including all chilling procedures (changes, current procedures, etc.), and make individual test-bird results available.

4. Assure that established procedures of washing, chilling, and draining are not changed, by spot checking control factors and opening cuts several times daily.

5. Allow changes in chilling procedures, provided management follows instructions discussed under "Procedure Change."

Table 10.1 - Examples

Example (Ice-pack chickens)	Percent allowed	Test Number and results					Requirements
		#1	#2	#3	#4	#5	
A	12	10.5	10.5	12.7	10.5	10.5	Start new 5-test series when 5th test is completed.
B	12	12.5	10.5	12.2	10.5	10.5	Retain product between #3 and #4. Start new series.
C	12	13.1	10.5	10.5	12.5	10.5	Retain product between #1 and #2 and between #4 and #5. Start new series.
D	12	10.5	10.5	12.5	10.5	12.5	Retain product between #5 and #6. If #6 is above tolerance, keep product retained until a test shows compliance. Then start new series.

(2) Moisture loss; calculation.
Required moisture loss can be determined by:

1. Adding 100 (percent) to 10-bird test gain.
2. Dividing results into total weight (ounces) of 50-bird sample.
3. Multiplying estimated original weight by allowed percent.
4. Adding allowed ounces to estimated original weight.

Example: Tests on frying chickens to be consumer packaged and frozen show 13.25 percent moisture absorption. Table I, Zone A of the regulations allows 8 percent. Thus, the sample must lose 5.25 percent. The 50-bird sample (after chilling) weighs 1,936 ounces.

100.00
+13.25 (gain of 10-bird test)
113.25

113.25 / $\frac{1709}{1936.0000}$ (estimated original weight)

17.09 (estimated original weight)
x .08 (allowed percent)
136.72 (allowed gain (ounces))

136.72 (allowed gain)
+1709.00 (original weight)
1845.72 (allowed weight)

1936.00
-1845.72
90.28

The 90.28 ounces is weight that sample must lose before retained product is released.

(3) Alternative. As an alternative, poultry may be held for a 24-hour continuous drain at 40° F. or below before shipping. However, it must not freeze to drain properly. Such product may be held in acceptable containers--approved ice-pack containers, tanks with open drain plugs, etc.

Ice-pack containers must have correct net weights before shipping.

(4) Record. Pertinent information on retained product must be recorded under "remarks" on Form MP 549.

PART 11

POST-MORTEM INSPECTION

PROCEDURE

Subpart 11-A

(Regs: M-310, 311, 315; P-Subpart K)

The Federal meat and poultry inspection acts require a post-mortem inspection be done by an inspector on each carcass of livestock or poultry.

11.1 ROUTINE INSPECTION

(a) Training Films

Routine inspection of every carcass shall be done as shown in the post-mortem inspection training films; however, RD may approve variations, provided procedures are not omitted.

(b) Mirror

Mirrors may be used as aid in viewing outer surfaces of sheep, goats and swine carcasses.

(c) Inspector's Station

Certain areas are provided for inspectors; other personnel must not encroach on them.

(d) Observation of Facilities and Equipment

Inspectors assigned to post-mortem inspection shall observe facilities, personnel, clothing for inspection.

necessary
to determine
extent of

conditions affecting carcass or part disposition.

Exception! Poultry inspectors shall not use knives or instruments on eviscerating lines, except under special, approved conditions.

(f) Unnecessary Mutilation, Condemnation

The inspector shall avoid unnecessary mutilation of carcasses or parts that may finally be passed for food, or unjustified condemnation of carcasses or parts.

(g) Slicing of Lymph Nodes

When, in livestock carcasses, lymph node inspection requires use of a knife, tissues shall be sliced to expose and examine the surfaces thoroughly. Washing nodes by hacking or chopping is unacceptable.

(h) Cattle

(1) Head inspection. It shall be completed before viscera inspection of corresponding carcass.

(i) Tongue in.

1. Observe head's surfaces and eyes.
2. Incise and observe mandibular, parotid, atlantal, and supratharyngeal lymph nodes.
3. Incise and observe lateral and medial masticatory muscles (cheeks) after tongue "dropping."
4. Observe and palpate tongue.

(ii) Tongue out - base up.

1. Incise lymph nodes attached to the tongue--supratharyngeal, atlantal, mandibular.
2. Observe and palpate tongue.

3. Observe head's surfaces and eyes.

4. Incise and observe parotid lymph nodes, lateral and medial masticatory muscles.

(iii) Tongue out - base down.

1. Incise lymph nodes attached to the tongue--atlantal, mandibular, suprapharyngeal.

2. Observe and palpate tongue.

3. Observe head's surfaces and eyes.

4. Incise and observe parotid lymph nodes, lateral and medial masticatory muscles.

(2) Viscera inspection.

1. When evisceration is done into viscera truck(s), follow procedures described under "hind quarter inspection" unless a carcass (rail) inspector is assigned, then observe eviscerated carcass. If evisceration is done onto moving top table, observe eviscerated carcass.

2. Observe mesenteric lymph nodes, and abdominal viscera.

3. Observe and palpate ruminoreticular junction.

4. Observe esophagus and spleen.

5. Incise and observe lungs' lymph nodes--mediastinal (posterior, middle, anterior) and bronchial (right and left).

6. Observe and palpate costal (cured) surfaces of lungs.

7. Incise heart, from base to apex or vice versa, through interventricular septum, and observe cut and inner surfaces.

Alternative. At plant management's request, the heart may also be inspected as follows: After the inspector examines the heart's outer surface, a plant employee must completely evert it, after cutting through the interventricular septum and other tissues. The inspector then examines the inner surfaces and makes not more than four deep, lengthwise incisions into septum and ventricular wall. If cysticercosis is suspected, more incisions shall

be made. Cutting through the heart's walls should be avoided. If necessary, carcasses and hearts shall be identified with consecutively numbered tags.

8. Turn lungs over; observe ventral (flat) surfaces and heart's outer surface.

9. Incise and observe hepatic (portal) lymph nodes.

10. Open bile duct (both directions) and observe its content.

11. Observe and palpate liver's ventral surface.

12. Turn liver over, palpate renal impression, observe and palpate parietal (dorsal) surface.

(3) Carcass inspection. It must be done after carcass splitting and before washing. Depending upon facilities available, carcass inspection may be divided into "hindquarter," "forequarter," and "complete" inspection.

(i) Hindquarter inspection. Used where viscera and carcass inspections are combined.

1. Observe back of skinned carcass while eviscerated.

2. Palpate superficial inguinal, or supramammary, and internal iliac lymph nodes.

3. Observe body cavities.

(ii) Forequarter inspection. It completes carcass inspection started under "hindquarter inspection."

1. Observe cut surfaces of muscles and bones, diaphragm's pillars and peritoneum.

2. Observe and palpate kidneys and diaphragm.

3. Observe pleura, neck, and carcass exterior.

(iii) Complete inspection. Used in moving lines with separate carcass inspection stations.

1. Palpate superficial inguinal, or supramammary, and internal iliac lymph nodes.

2. Observe lumbar region.

3. Observe and palpate kidneys.

4. Observe diaphragm's pillars and peritoneum.

5. Observe and palpate diaphragm.

6. Observe pleura, cut surfaces of muscles and bones, neck, and carcass exterior.

(i) Calves

(1) Skinned carcass.

(i) Head inspection.

1. Observe head's surfaces.

2. Incise and observe suprathyroid lymph nodes--left and right.

(ii) Viscera inspection.

1. Observe and palpate lungs' lymph nodes--bronchial, mediastinal--costal (curved) surfaces of lungs, and heart.

2. Turn lungs over and observe ventral (flat) surfaces.

3. Observe spleen.

4. Observe and palpate dorsal surface of liver.

5. Turn liver over, observe ventral surface and palpate portal lymph nodes.

6. Observe stomach and intestine.

(iii) Carcass inspection.

1. Observe outer and cut surfaces.

2. Lift forelegs and observe neck and shoulders.

3. Observe body cavities.

4. Observe and palpate internal iliac lymph nodes and kidneys.

(2) "Hide-on" carcass. Inspection procedures of "hide-on" carcasses must include observation of hide for contamination, parasitic conditions and other abnormalities, and palpation of back for grubs.

(3) Large calves. Inspection of large calves shall be as described for cattle.

(j) Sheep and Goats

(1) Viscera inspection.

1. Observe abdominal viscera, esophagus, mesenteric lymph nodes, and omental fat.

2. Observe bile duct and content, and express gall bladder.

3. Observe and palpate liver (both sides), and costal surfaces of lungs.

4. Palpate bronchial and mediastinal lymph nodes.

5. Observe ventral surfaces of lungs.

6. Observe and palpate the heart.

Pancreatic glands. Sheep pancreatic glands, saved for edible purpose, shall be examined for wholesomeness. Tapeworms in bile duct indicate possible infested glands.

(2) Carcass-head inspection.

1. Observe outer surfaces of carcass, body cavities--pelvic, abdominal, thoracic--and spleen.

2. Observe and palpate kidneys.

3. Palpate prefemoral, superficial inguinal, or supramammary, and popliteal lymph nodes.

4. Palpate back and sides of carcass.

5. Palpate prescapular lymph nodes and shoulders, and lift forelegs.

6. Observe neck, shoulders, and head.

(3) Lymph node incision. Inspectors shall incise body lymph nodes when palpation is inadequate to determine absence of caseous lymphadenitis. Incised nodes should remain attached to the carcass for final inspection.

(k) Swine

Inspectors must examine carcasses, organs, and parts for diseases, abnormalities, cleanliness.

(1) Head inspection.

1. Observe head and cut surfaces.

2. Incise and observe mandibular lymph nodes.

3. Observe/retain carcass when required.

(2) Viscera inspection.

1. Observe eviscerated carcass, viscera, and parietal (top) surface of spleen.

2. Observe and palpate mesenteric lymph nodes.

3. Palpate portal lymph nodes.

4. Observe dorsal surfaces of lungs.

5. Palpate bronchial lymph nodes.

6. Observe mediastinal lymph nodes.

7. Turn lungs over and observe ventral surfaces.

8. Observe heart.

9. Observe dorsal surface of liver.

10. Turn liver over and observe ventral surface.

11. Condemn viscera or parts when required.

12. Retain carcass, viscera, and parts when required.

(3) Carcass inspection.

1. Look in mirror and observe back of carcass. NOTE: Where mirror is not required, turn and observe back of carcass.

2. Observe front parts and inside of carcass.

3. Grasp, turn, and observe kidneys (both sides).

4. Direct trim, remove retain tags, or retain carcass when required.

(4) Responsibility. Plant management should assure that all heads, viscera and carcasses are prepared and presented for inspection adequately so the inspector needs not perform additional steps to examine them.

When, in the inspector's in charge judgment, any of the above steps cannot be performed at the current slaughter line speeds because of preparation or presentation deficiencies, or because of disease incidence, the inspector in charge will require the establishment to reduce the line speed until all conditions are favorable.

(I) Horses and Other Equines

(1) Head inspection.

1. Observe head's surfaces.

2. Observe and palpate (incise when necessary) mandibular, pharyngeal

and parotid lymph nodes, guttural pouch, and tongue.

(2) Viscera inspection.

1. Observe and palpate lungs, bronchial and mediastinal lymph nodes (incise when abnormal).

2. Incise and observe heart as for cattle.

3. Observe and palpate spleen, liver (both surfaces), and portal lymph nodes.

4. Open hepatic (bile) duct as for cattle.

5. Observe rest of viscera and body cavities.

(3) Carcass inspection. Inspect as for cattle (11.1(h)(3)). In addition, observe (and incise when necessary):

1. Inner abdominal walls for encysted parasites.

2. Spinous processes of thoracic vertebrae, supraspinous bursa, and first two cervical vertebrae for fistulous conditions.

3. Axillary and subscapular spaces of white and gray horses for melanosis.

(m) Kidney Inspection

Before viscera or carcass inspection, plant employees shall adequately expose all kidneys of livestock carcasses from fat covering and capsule. The inspector shall then examine them during viscera or carcass inspection. When examined with the viscera, kidneys must be removed from the carcass and presented for inspection with other organs.

(n) Inspection of Swine Uteri and Ovaries

Nongravid swine uteri and ovaries may be saved for domestic and/or export edible use if presented for inspection with the viscera so that the inspector can easily observe them.

Gravid uteri are considered inedible; they should be removed from the viscera before inspection and handled as inedible product. Ovaries with any follicular

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* activities are also considered
 * inedible; they may be removed by
 * plant employees after viscera
 * inspection, but before reinspection
 * and packing.

* During viscera inspection, the
 * inspector shall:

* 1. Observe uteri and ovaries, and
 * palpate them if abnormal.

* 2. Pass for human consumption
 * normal uteri with normal ovaries, or
 * with ovaries showing only follicular
 * activities which will be removed
 * before reinspection.

* 3. Condemn contaminated, gravid or
 * abnormal uteri with abnormal ovaries.

* Uteri and ovaries with anatomical,
 * physiological and pathological
 * abnormalities, such as congestion,
 * enlargement, metritis, pyometra,
 * follicular activity, etc., are
 * abnormal and considered inedible.
 * Since the young swine female is
 * polyestrous, it is normal for the
 * uterus and ovaries to be in some
 * stage of estrus until becoming
 * pregnant. Therefore, it is not
 * unusual for the uterus to be in some
 * stage of engorgement with varying
 * degrees of hyperemia of the
 * endometrium.

* This type of uterus is considered
 * normal. However, uteri from animals
 * in actual estrus, as manifested by
 * excessive congestion and enlargement,
 * are abnormal and considered inedible.

* After viscera inspection, plant
 * employees will remove ovaries that
 * are abnormal or show follicular
 * activity from passed uteri and
 * present for reinspection all uteri
 * and/or ovaries saved for edible use
 * at a location acceptable to the
 * inspector in charge.

* The inspector will reinspect
 * 10 percent of the uteri and/or
 * ovaries and assure that all abnormal
 * ovaries are removed and handled as
 * inedible product. If one abnormal
 * ovary is found in a lot, the inspec-
 * tor will retain it, require rework of
 * the entire lot, and again reinspect
 * 10 percent of the lot.

* As appropriate, the product must

be labeled Swine (or Pork) Uteri, or
 Swine (or Pork) Uteri/Ovaries, or
 Swine (or Pork) Ovaries. *

(o) Poultry

Inspector in charge is responsible
 for frequently assuring that poultry
 is properly defeathered and adequately
 presented for inspection.

Product must meet ready-to-cook
 requirements before chilling.

(1) Carcass-viscera inspection.

1. Observe and palpate tibia
 (drumstick).

2. Observe hock joints.

3. Open body cavity and observe
 inner surfaces and organs.

4. Observe and palpate liver, heart,
 and spleen. Crush spleen of mature
 poultry.

5. Observe other viscera and car-
 cass exterior.

6. Instruct trimmer on disposition
 of abnormal or diseased carcasses
 (hang back, trim, remove viscera,
 condemn, etc.).

(2) Inspection rates; line speeds.

(i) Inspector's responsibility.

Since under all conditions it is
 impractical to establish inspection
 rates and eviscerating line speeds in
 all plants, the inspector in charge
 is responsible for determining line
 speeds resulting in adequate
 inspection.

The highest speed may vary depending
 upon various factors--poultry class
 and presentation, disease incidence,
 plant personnel ability to sanitarily
 accomplish eviscerating procedures,
 etc.

The inspector in charge shall reduce
 line speeds when necessary, and shall
 increase them back to normal when all
 conditions are favorable.

(ii) Facilities and procedures. The
 following facilities and procedures are
 required:

1. Lighting--of enough intensity,
 uniform, and properly directed at work
 levels.

2. Hand-washing facilities--adequate
 and properly located.

3. Lines with two or more inspection stations--with dividers or marked shackles to prevent inspectors' confusion.

4. Shackle suspensions--suitable for poultry carcass.

5. Conveyor belts or pans (when used)--synchronized with overhead conveyors and sanitized when saving viscera for edible purpose.

6. Line start and stop control--within inspector's reach.

7. Inspector's worksheet holder--conveniently located for inspector and helper.

8. Trained inspector's helper.

9. Carcass and viscera--adequately presented for inspection to allow prompt examination of entire carcass (inner and outer surfaces), and all organs. Visceral organs--heart, liver, gizzard, etc.--must be presented close to the carcass, (not farther than 6 inches and preferably suspended by natural attachments below the carcass opening).

10. Foreman's cooperation. Close cooperation between foreman and inspector is always necessary.

(iii) Inspection rates; studies.

Studies show that as disease incidence increases inspector's errors increase unless line speeds are reduced. Thus, lines should be operated at rates that result in product showing no evidence of inspection errors.

Table 11.1 shows study results on highest inspection rates obtained in some poultry plants without errors. For the various factors involved, such rates may be used as a guide and not be considered standards.

(iv) Product flow. To prevent contamination and bacterial buildup and to comply with chilling requirements, line speeds must result in smooth product flow (no pileup). Giblets shall be processed to ready-to-cook stage at carcass speed rate.

II.2 DELAYED INSPECTION (LIVESTOCK)

Low volume plants are eligible for delayed post-mortem inspection, provided:

1. Carcasses and organs are inspected on slaughter day, unless otherwise approved by RD.

2. Sanitation inspection of facilities, equipment, and plant employees' clothing is done during post-mortem inspection.

3. Ears with identification tags and tattoos (swine) are left attached to carcasses until inspected.

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Table 11.1 - Inspection rates

Birds per inspector per minute		Young chickens												Fowl		Turkeys								
																Fryer-roaster			Hens			Toms		
Number of inspectors		1	1	1	2	2	3	4	4	6	8	1	2	1	2	1	1	2	1	1	2	1		
Distance between birds (inches)		6	12	18	6	12	6	6	6	6	6	12	6	8	8	12	12	12	24	12	12	24		
Distance between inspected birds		6	12	18	12	12	18	24	12	18	24	12	12	8	8	12	12	12	24	12	12	24		
Suspension	2 pt	23	20	15	20	23	15	12	20	15	12													
	3 pt	23	23		23							15	15	20	18	14	14	15	13	10	6	6		
	Wing		18			18																		

4. Plant employees collect blood from back-tagged animals during slaughter.

5. Carcass, head, intestine, bladder, cow's uterus and udder are identified with multisectioned numbered tags.

6. Methods of holding bladder, esophagus, intestine, uterus and udder (female) from each carcass are approved by area supervisor.

An acceptable method is placing each abdominal viscera set into a clean receptacle (galvanized tub mounted on casters). Such receptacle must be tightly covered with plastic or other suitable material when foreign odors and fluids from pathologic conditions are present.

7. Evisceration is done without contaminating carcass, viscera, facilities, or equipment. When gastrointestinal tract is cut, ties shall be made as described in Part 10.

Stomachs of cattle, calves, sheep, and goats can be removed from other abdominal viscera and discarded. However, they must be handled sanitarily.

8. Lungs, heart, liver, and spleen are left attached to the carcass by natural attachments.

9. Any carcass contamination is removed. Grubs, bruises, or pus contamination must be trimmed before carcass washing. Removed tissues must be identified with the carcass and held for inspection with inedible viscera. When any part, organ or tissue is missing, and there is evidence of possible diseased animal, carcass shall be condemned.

10. Any part or organ (tongue, lymph nodes, etc.) difficult to palpate after chilling, is sliced for inspection.

11. Inedible abdominal viscera and all removed tissues are kept refrigerated until after inspection and, if placed in edible product coolers, are prevented from contaminating carcasses, product and facilities.

12. To prevent cross-contamination, enough space is between (uninspected) carcasses.

DISPOSITION

Subpart 11-B

(Regs: M-310, 311; P-Subpart K)

Carcasses and/or parts with abnormalities or diseases shall be handled as required by regulations. Since it is impractical to formulate rules for each abnormality or disease, and to designate an exact stage at which each process becomes unwholesome, disposition of carcasses and/or parts, with abnormalities or disease not specifically covered by regulations or other instructions, is left to the judgment of the veterinarian.

ABNORMALITIES; DISEASES

11.5 LIVESTOCK

(a) Carcass Tagging

When carcasses are tagged on initial inspection to indicate conditions found, the following rules shall apply:

Cattle--Conditions shall be identified by letter coding tags with pencil or ink only, such as: AC - Actinomycosis, AB - Abscess.

Swine--Tags shall be attached to the side of the carcass approaching the viscera inspector and as follows:

1. Tuberculosis (cervical) - abdomen, lateral to xiphoid cartilage.
2. Cervical abscess - (1) slight, to foreshank; (2) well-marked or extensive, to axillary area.
3. Not to be opened - midline, above xiphoid cartilage.
4. Other conditions - abdomen, lateral to midline.

(b) Suspects

"U.S. Suspects" should not be examined until ante-mortem findings are received by inspectors on post-mortem inspection.

(c) Delayed Evisceration

When bled carcasses are left unopened a long time (careless handling, breakdown, etc.), disposition is affected by several factors--carcass size, room temperature, type and amount of stomach and intestinal contents, and evisceration delay time.

Disposition must be based upon post-mortem findings--local or superficial absorption of intestinal gases, and changes caused by tissue decomposition--rather than on evisceration delay time.

(d) Contamination

Contamination must be removed promptly and without contaminating other product or tissue.

Excessively contaminated parts or organs shall be condemned.

- (1) Stomach-intestinal contents; bile. Accidental contamination by stomach, or intestinal contents, or bile, must be removed before inspection is completed.

- (2) Milk, pus, exudate. Contamination with milk, pus, exudate or pathologic tissue must be trimmed under inspector's direct supervision. Scraping, wiping, or washing is unacceptable.

(e) Kidneys

All kidneys with pathologic lesions--abscesses, nephritis, etc.--shall be condemned.

- (1) Cystic lesions. Kidneys with cystic lesions can be handled as parasitic pork livers. Those with slight lesions may be passed for edible purpose after cysts are removed by plant employees. Those with marked or extensive lesions shall be condemned.

- (2) Lymphocytic infiltration. Kidneys with marked or extensive lymphocytic infiltration (white spots or streaks) shall be condemned.

(f) Pigments.

(1) Exogenous Pigments from outside the body are known as "exogenous" pigments.

(i) Lipochrome, carotene; carotenosis. Lipochrome and carotene are fat soluble pigments of green plants which give the normal yellow color to animal fat. However, they may also cause "hepatic carotenosis" (unusually yellow liver).

(ii) Carotenosis test. A practical test for carotenosis is placing a white paper towel or napkin on a liver cut surface. An orange-bronze stain indicates carotenosis.

(2) Endogenous. Pigments formed inside the body are called "endogenous" pigments. They are normally in the body and take part in its metabolism. However, when they are in abnormal sites or in abnormally large amounts, they have certain significance requiring thorough examination of affected carcasses and/or parts.

(i) Melanin; Melanosis. Melanin deposits are normally present in the tongue, brain, and palate of certain animals.

Melanin deposits (black spots of irregular shape) in various organs, especially lungs and aorta, cause a condition known as "melanosis." Since tissue texture, consistency, and form are not changed, the carcass can be passed for food after removal and condemnation of affected tissues.

When melanin deposits in muscles, connective tissue, peritoneum and fat are not associated with malignant tumor formation, only affected tissues need be condemned.

When melanin cannot be completely removed, or its removal is impractical, or when it renders a carcass, organ or part unfit for human food, affected carcass, organ or part shall be condemned.

Slight melanin deposits in spinal meninges are insignificant. However,

when extending into spinal nerve sheaths and meat, they must be removed.

Uniform melanin deposits over or in circumscribed skin areas of swine are not required to be removed unless they are tumorous or smeary.

Reporting. Melanin deposits must be reported under pigmentary conditions. However, when they are associated with malignant tumor formation (malignant melanoma), disposition must be as required by (meat) regulations and reported under carcinoma.

(ii) Porphyrin; porphyria. Porphyrin causes a condition in young cattle or swine known as "porphyria." This is a congenital disturbance in hemoglobin metabolism, characterized by brownish to pinkish discoloration of bones and teeth dentin.

Carcasses with this condition may be passed for food, provided systemic changes are not present and affected tissues (bones) are removed and condemned.

(iii) Xanthosis (brown atrophy). It is a brownish discoloration of skeletal and cardiac muscles and liver found in old cattle or cattle with chronic wasting disease. It results from disposition of excessive quantities of waste pigment (from cell's cytoplasm).

Affected carcass can be passed for food, provided discoloration is slight, localized, and can be removed. When the condition is extensive or generalized, carcass shall be condemned.

(iv) Bilirubin (Icterus). Carcasses showing any degree of icterus with parenchymatous degeneration of organ the result of infection or intoxication, and those showing pronounced yellow or greenish yellow discoloration without evidence of infection intoxication shall be condemned.

Final disposition of carcasses showing slight yellow discoloration with no visible pathological changes organs shall be deferred until the

have been chilled and reexamined, preferably under natural light or good quality light of at least 50 foot-candles. If discoloration disappears, such carcasses shall be passed for food, provided there are no other conditions warranting a different disposition. Carcasses showing persisting discoloration shall be condemned according to regulations (311.19).

(g) Use of Pathology laboratory

When veterinary inspectors desire diagnostic assistance, they may send specimens to the pathology laboratory (Subpart 23-C).

Ante- and post-mortem findings must be considered with laboratory's report.

Private laboratory. Poultry released to institutional or private laboratories shall be released only on completion of MP Form 112, Laboratory Specimen Receipt (see Part 20).

(h) Carcass Passed for Cooking

Carcasses and parts passed for cooking shall be held under strict control until cooked as required by regulations (315).

Trucks and containers used for holding or transporting such products shall be equipped with sealing devices and be properly marked.

(i) Cattle

(I) Actinobacillosis, actinomycosis.

The inspector shall carefully examine lesions resembling actinobacillosis or actinomycosis and, when necessary, incise them to determine character and extent.

When head only is affected, body lymph nodes are not required to be incised. However, carcass shall be carefully examined and body lymph nodes palpated.

When viscera are affected, anterior, middle, and posterior cervical lymph nodes shall be incised.

Cervical lymph nodes shall be removed from neck region when lesions are in the head.

(2) Anaplasmosis. Carcasses of animals recovered from anaplasmosis may be passed for food, provided the yellow carcass color disappears when chilled and other disease lesions are not present.

(3) Tonsil, ulcer, scar. Under inspector's direction, plant employees shall remove tonsils, ulcers, and scar tissues from heads or tongues.

(4) Cactus thorns. Tongues with cactus thorns and/or cactus thorn abscesses shall be condemned (311.9 (d)).

(5) Cysticercosis.

(i) Carcass. When a beef carcass is retained for cysticercosis, the final inspector shall:

1. Thoroughly incise lateral and medial masticatory muscles, heart, diaphragm, and its pillars. The peritoneum must be removed before incising the diaphragm.

2. Observe and palpate tongue. If cysts are suspected in the muscular part, the tongue shall be thoroughly incised and observed.

3. Examine esophagus and all exposed muscular surfaces.

4. When cysts in a carcass are in two or more (of the above) sites, (a) make one transverse cut in each shoulder (2-3 inches) above the olecranon's point. This cut should extend to the humerus and expose the triceps brachii; (b) make one cut also in each round to expose musculature in cross section.

(ii) Lot. When one beef carcass in a "lot" is found to contain a cyst, the following procedure shall be required on all carcasses in that lot:

1. Multiple incising of the inter-ventricular septum, external and internal muscles of mastication. Also, close observation shall be made of the esophagus and cut surfaces of muscles exposed during dressing operation.

2. If available and identified as part of the affected lot, hearts and cheeks from carcasses which had passed inspection prior to finding the infected carcass shall be incised as above.

Inspectors should be cautioned that some plants may attempt to separate an original lot into small sublots to decrease the number of cattle carcasses subject to this expanded procedure. Such a practice should not be permitted.

(iii) Specimen collection; report.

Collect all live cysts from the heart and masticatory muscles and submit (in formalin) with a completed MP Form 23 to: Veterinary Services Laboratories, Pathology and Toxicology Laboratory, USDA, APHIS, P.O. Box 70, Ames, Iowa 50010.

Report affected animals (or lots) to VS on VS Form 2-11. Give identifying tag numbers and owner's name and address (if available), and distribute copies as indicated on the form.

Enter the MP Form 23 serial number on the VS Form 2-11 under remarks.

(6) Eosinophilic myositis. It is primarily found in cattle, occasionally in sheep, and rarely in swine. It is characterized by yellowish, yellowish-green or greyish white foci, small, spindle-shaped and irregularly distributed in skeletal and cardiac muscle areas. These foci, for their similarity with cysts of the genus *Sarcocystis*, may (grossly) be mistaken with sarcosporidiosis lesions.

Eosinophilic myositis is most readily detected in warm carcasses. Chilling, causing muscle contraction, reduces size and appearance of lesions. In most cases, active muscles are more severely affected.

(i) Procedure. The final inspector shall:

1. Thoroughly incise (with numerous incisions) and observe lateral and medial masticatory muscles and heart.

2. Observe and palpate esophagus.

3. Make several deep longitudinal incisions into the tongue.

4. Thoroughly incise and observe diaphragm and pillars, after removal of peritoneum.

5. Observe cut surfaces of muscle exposed during dressing operation. When lesions are in any of them, make several parallel incisions to all such cut surfaces. Also, after removing the peritoneum, thoroughly incise and observe abdominal muscles. If lesions are in any cut surface exposed during above procedures, affected primal part(s) shall be freely slashed and closely examined.

(ii) Disposition. When the disease is localized and only certain parts are affected (head, tongue, heart, esophagus, diaphragm and pillars), such parts shall be condemned. When carcass muscles other than diaphragm and pillars are affected, disposition shall be as required by regulations (M-311.35).

(7) Eye missing. Absence of an eye or associated structure in mature cattle may indicate surgical removal of epithelioma. Head of such carcass must be condemned. Head, viscera, and carcass shall be thoroughly examined for metastatic lesions and, if present, entire carcass must be condemned.

(8) Proteolytic enzyme. Carcasses and organs injected with enzyme solutions may show hyperemia of subcutaneous fascia, edema and/or hyperemia of body lymph nodes, sero-hemorrhagic fluid in thoracic cavity, congestion of thoracic and abdominal organs, edema and hemorrhage of lungs and kidneys.

Carcasses with slight effects may be passed for food after removal of affected tissues.

Carcasses with marked or severe congestion of subcutaneous tissues and/or viscera shall be condemned.

(9) Nerve sheath tumors. They are common in adult cattle and may occur singly, but most commonly in multiple growths along nerve trunks, in the

heart, brachial plexus, intercostal spaces, paravertebral areas, mediastinum, and coeliac plexus.

These tumors vary in size, are nodular, and encapsulated. They are white and either hard or soft and gelatinous. The latter type in the heart may be mistaken for live tapeworm cysts.

When several tumors are present, they appear of multicentric origin and do not metastasize.

Carcasses can be passed for food after removal and condemnation of abnormal tissue, unless systemic effects are involved.

(10) **Brucellosis reactors.** They do not require special handling, nor need to be classed as suspects or retained. However, they must be identified and reported as outlined in Part 20.

Testicles. Testicles of brucellosis reactor must be condemned.

(II) Tuberculosis.

(i) **Reactors.** They shall be examined as suggested in the "Inspection of Tuberculosis Reactors" guide, and identified by "U.S. Retained" and reactor's tag numbers. They shall be reported as outlined in Part 20.

(ii) **Suspects; exposed.** Animals identified as "suspects" or "exposed" shall receive a routine post-mortem inspection. Disposition of their carcasses would be based on lesions present. Carcasses without tuberculosis lesions shall be passed without restriction if otherwise acceptable.

* * *

(j) Calves

(1) **Arthritis.** All carcasses with arthritis shall be completely skinned before removal of affected joints. Such joints and regional lymph nodes must be removed on the "kill" floor.

(2) **Injection lesions.** Carcasses skinned after chilling must be examined for injection lesions, parasites, bruises, etc. All abnormal tissues must be removed and condemned.

When an injection lesion is found, carcass must be retained and specimens must be sent to the laboratory.

(k) Sheep and Goats

(1) **Caseous lymphadenitis.** The final inspector shall examine retained carcasses and viscera--including: (1) palpation and incision, when necessary, of carcass lymph nodes--prefemoral, superficial inguinal (or supramammary), internal iliac, sublumbar, renal, prepectoral, prescapular, popliteal, etc.; (2) observation and palpation of kidneys.

(2) **Needle grass.** Needle-like awns of a plant (*Stipa comata*) may penetrate the skin and lodge in the subcutaneous tissue causing localized inflammations. This condition is seasonal, and is referred to as "needle grass" or "wild oats."

When carcasses have only a few lesions, or when only a few carcasses are affected, lesions shall be removed during dressing procedures.

When carcasses are extensively affected, or when many carcasses are involved, they may be placed in coolers, provided they are identified, segregated, and held until trimmed and released.

(1) Swine

(1) Abscess.

(i) **Cervical.** When a small, well-encapsulated abscess is in a cervical lymph node, head may be passed for food after removing affected lymph node.

To prevent contamination, swine heads condemned for extensive or well-marked abscesses may be removed--at inspector's direction--immediately after head inspection; they need not remain with the carcass for final disposition.

When only the head is affected, it shall be reported in the "unlisted tags" section of Form MP 402 6 (see Part 20).

(ii) **Ham facing abscess.** Plant employees shall remove all abscesses in ham facings before splitting.

(2) **Abscess-tuberculosis.** When a swine carcass has cervical lymph nodes with a slight abscess and mesenteric lymph nodes with a tuberculosis lesion, such carcass shall be retained and examined by the final inspector. Specimens of questionable lesions should be sent in the laboratory.

(3) **Lymph node removal.** Plant employees must remove all lymph node tissue from necks of carcasses affected with cervical abscesses or tuberculosis.

When heads with slight abscesses are passed for food, affected lymph nodes, mandibular and adjacent lymph nodes must be removed.

(4) **Liver and lung pieces.** Plant employees shall remove remnants of liver and lungs from all carcasses.

(5) **Stick wound.** Stick wounds or portions of such wounds exposed to scald water or other contaminant must be trimmed during dressing operations and condemned. Other stick wounds must be opened for proper washing and blood clots.

floors, benches, and equipment contaminated by affected carcass; (d) cleanse and disinfect arms and hands of employees who contacted infected material as outlined in regulations (M-310.9).

3. General clean up and disinfection as required by regulations.

(7) **Arthritis.** Joints with localized arthritis and corresponding lymph nodes shall be removed and condemned during dressing operations and before inspection is completed.

Alternative. Hind feet with arthritic hock joints may be removed and condemned on porkcut, provided plant employees:

a. During dressing operations and before inspection is completed, remove corresponding lymph nodes and identify affected hind feet on hanging carcasses by (1) making a horizontal incision through the skin below the hock joint, and (2) applying an approved dye to the affected foot.

b. Segregate affected carcasses as separate lot in the cooler(s).

c. At the end of porkcut operations and under inspector's direct supervision, cut segregated lot after removal of all edible product which might comingle with condemned hind feet.

d. Clean and sanitize with 180°F. water or approved chemical sanitizer all equipment (saws, tables, conveyors, etc.) used for removing arthritic joints after cutting or immediately if such equipment becomes contaminated with synovial fluid or diseased tissue.

Note: This alternative does not apply to carcass in which a hock joint is opened.

(8) **Atrophic rhinitis.** Swine with atrophic rhinitis may have a characteristic nose disfiguration, absence of nasal turbinate bones, and small amounts of pus or catarrhal exudate in nasal sinuses.

The turbinates' soft tissues may be present, but they are folded against the nasal cavity wall since the supporting bony structure has disappeared.

(d) Record

Each inspector shall have the "trim helper" record on MP Form 514 condemned carcasses in the appropriate blocks and all carcasses retained for veterinary examination under the word "retained" entered in the remarks space.

(1) Plant rejects. Unopened carcasses rejected by management before inspection shall be condemned and recorded on MP Form 514 under "other." The statement "Rejected by Plant Management" shall be entered under remarks. Plants desiring an official disposition of these carcasses must provide assistants for handling them and adequately lighted rack(s) in a place approved by the inspector in charge.

The inspector in charge or his designee will examine and dispose of such carcasses according to regulations. He will record condemned carcasses on an MP Form 514, maintained for this purpose only. Carcasses not condemned will be returned to the line by plant employees for evisceration and inspection.

Above operations will be conducted in an orderly and sanitary manner.

(2) Unlisted conditions. Carcasses condemned for unlisted abnormalities or diseases shall be recorded on MP Form 513, 514, and 514-1, under "remarks" or "other" with condemnation reason.

(e) Retained Product

When product is retained for further inspection, identity and wholesomeness should be preserved. Identity can be maintained by keeping product under Government lock or seal, and/or by using retained tags. Product wholesomeness can be maintained by preventing contamination, dehydration, and decomposition with plastic bags, slush ice, or other (refrigeration or freezing) means. If necessary, samples of retained product may be sent to the laboratory (see Part 23).

(f) Systemic Condition

When a systemic condition is evident, carcass and viscera must be condemned.

(g) Liver Condemnation

Livers with the following diseases or abnormalities must be condemned:

1. Fatty degeneration--characterized by well defined light spots. Livers with a uniform yellow color, due to excessive fat deposits (fatty infiltration), are considered wholesome. They are commonly found in fat birds, especially fowl, and occasionally fryers.

2. Extensive petechiae or hemorrhages. The typical "paint brush" appearance is considered insignificant.

3. Inflammation, abscess, necrosis.

4. Cirrhosis, tumor, cyst. Livers with one large cyst or several small cysts shall be condemned.

5. Discoloration--caused by gall bladder or bile duct disorders, post-mortem changes, etc.

6. Specific disease (entero-hepatitis).

7. Contamination--from intestinal contents or noxious materials.

(h) Kidney Condemnation

Kidneys shall be removed from carcasses showing:

1. Renal or splenic pathology.

2. Hepatic lesions causing liver condemnation.

3. Conditions requiring condemnations of all viscera.

4. Airsacculitis--when carcass or its posterior part is salvaged.

(i) Contamination

Carcass and/or part disposition shall be according to regulations (P-381.91). In lieu of condemnation, carcasses affected with certain contaminants such as feces or ingesta may be reprocessed and made acceptable by trimming.

(ii) Salvaging operation. Contaminated carcasses may be salvaged, provided adequate facilities and equipment are available, and (2) the operation, approved by area supervisor, is always done sanitarily.

(iii) Facilities

1. Salvage station. It should be located in a designated area and have adequate space for a sanitary and efficient operation.

2. Retain rack. Each station shall have adequate retain racks in rows spaced high enough to prevent cross contamination of suspended carcasses.

3. Trough or table. A trough or table with a steep, sloping bottom drained into a gutter or other drainage facility, is necessary. A stainless steel grill for dropped carcasses is desirable over the trough or table.

(iv) Equipment

1. Containers. Vats, tanks, or other suitable containers for chilling product. Knife rack or stand.

2. Spray nozzle with proper fittings to clean carcasses.

3. Gosseneck or other acceptable facility for washing hands and tools.

4. A minimum of 50-foot candles of light.

(ii) Offline Salvaging Procedure

1. After viscera removal, the carcasses may hang contaminated carcasses (e neck) on designated area of retained rack.

2. Carcasses are then transferred from retain rack to salvage station, where they are suspended with anterior end up to prevent contamination during washing and trimming.

3. External carcass surfaces will be thoroughly washed before cutting.

4. Salvage must be done (a) by properly trimming contaminated tissues, (b) without cutting into the body cavity and opening cut edges.

5. Controls for salvage operations will be determined by the product handling capabilities at the salvage station and not at the individual inspection station. If retain racks are filled either at the inspection station or the salvage station, inspectors in charge should allow plants the option of disposing of contaminated birds, or adjusting the production rate. Birds disposed of by the plant should be recorded under "other" with a notation that the plant took the action. Inspectors in charge should not set an arbitrary limit on number of birds to be held at the inspection or salvage stations, but rather should be guided by good sanitary practices. Guidelines for judging efficiency of this operation could be significant loss of body temperature, drying of the skin surfaces and/or discoloration of carcasses.

6. Salvaged parts must be chilled immediately (with crushed ice in continuously drained containers).

(iii) Online Salvaging Procedure

Drumsticks which (a) have the end broken during the processing operation and have the bone protruding through the skin or (b) have tissue separated from the bone resulting in possible contamination (e.g., a short cut hock) may be trimmed on the line in a sanitary manner provided the trim cut is far enough down the drumstick to ensure that only wholesome tissue remains on the drumstick.

Short hocks in which tendons remain attached and simple fractures with no break in the skin do not require trimming.

(iv) Inspector's Responsibility

The inspector in charge must assure that all requirements are met and only wholesome product is saved for food purpose. A plant failing to comply with this section will discontinue salvage operations.

(2) Overscald. It should not be confused with hard scald. In overscald the skin slips from the meat, and the intestine may appear cooked.

Carcasses or parts partially cooked by singeing or other causes shall be condemned and recorded as overscald.

(j) Bruises; Tears

Trimming bruises, hemorrhages, or tears requires judgment based upon extent, nature, and practicability of trimming to meet ready-to-cook requirements. The following guides apply to ready-to-cook product only, and not to grading standards:

1. Entire carcass shall be condemned when a bruise or hemorrhage is associated with systemic disturbance.

2. When a condition is localized, the carcass may be passed for food after removal and condemnation of affected part(s).

3. Areas, showing blood clumps or clots in superficial tissues--between skin layers or superficial muscles (wing vein rupture), loose subcutaneous tissue, along blood vessels, etc.--may be slit and clots completely washed out before the part is passed for food. When blood clumps extend into muscles, affected part(s) shall be removed and condemned.

4. Areas with slight reddening shall be handled according to section 381.89 of the regulations.

(l) Breast blister. Although inflammatory tissue adheres tightly to keel bone, affected tissues must be removed.

Removal of breast blisters or other abnormalities before inspection is not permitted since it may affect carcass disposition.

Carcass chilling is not allowed before blister removal, except when carcasses are retained several hours for reinspection, or when blister-affected carcasses belong to lots of

dressed poultry chilled before evisceration.

(2) Scar tissue. Healed lesions are considered wholesome. However, excessive scar tissue is objectionable to consumers and should be removed and condemned.

(3) Skin sewing. Sewing skin tears in torn or trimmed areas is permissible, provided it is sanitary and a tag, attached to the thread, clearly reads: "Skin Separations Caused by Tears or Removal of Tissue Sewed Together With White Cotton Thread. Remove Tag Before Cooking; Remove Thread Before Serving." Such tag shall be approved by STS-LP.

Only clean needles (4 inches or longer) and clean thread shall be used. The inspector shall assure that all needles are accounted for at end of operations.

(k) Breast Muscle Atrophy

Atrophied turkey breast (green atrophy, green breast, green muscle degeneration) is known to often be a breeding flock problem. Detection of early stage is difficult on routine post-mortem examination. The congestion created at the post-mortem station by the incidence indicative of flock involvement makes sanitary trimming difficult and seriously impedes processing. The procedures outlined below respond to these problems.

1. When the inspector in charge
 a. If the incidence is sufficient to
 condemn a flock
 b. The lot shall be retained
 c. The lot shall be processed in
 accordance with item 3.
 d. The lot shall be processed in
 accordance with item 3.
 e. The lot shall be processed in
 accordance with item 3.
 f. The lot shall be processed in
 accordance with item 3.
 g. The lot shall be processed in
 accordance with item 3.
 h. The lot shall be processed in
 accordance with item 3.
 i. The lot shall be processed in
 accordance with item 3.
 j. The lot shall be processed in
 accordance with item 3.
 k. The lot shall be processed in
 accordance with item 3.
 l. The lot shall be processed in
 accordance with item 3.
 m. The lot shall be processed in
 accordance with item 3.
 n. The lot shall be processed in
 accordance with item 3.
 o. The lot shall be processed in
 accordance with item 3.
 p. The lot shall be processed in
 accordance with item 3.
 q. The lot shall be processed in
 accordance with item 3.
 r. The lot shall be processed in
 accordance with item 3.
 s. The lot shall be processed in
 accordance with item 3.
 t. The lot shall be processed in
 accordance with item 3.
 u. The lot shall be processed in
 accordance with item 3.
 v. The lot shall be processed in
 accordance with item 3.
 w. The lot shall be processed in
 accordance with item 3.
 x. The lot shall be processed in
 accordance with item 3.
 y. The lot shall be processed in
 accordance with item 3.
 z. The lot shall be processed in
 accordance with item 3.

defined lot must be
 s "raw deboned"
 d for raw deboning

operations, or until post-mortem inspection is completed after chilling and in suitable facilities by bilaterally slashing each turkey breast and conducting necessary trimming. Either operation must be conducted under direct supervision of an MPI inspector.

Shipments of retained product (product not treated as in item 3) may be made only under official seal. Receiving inspector is responsible for assuring that further processing is conducted only as permitted by these instructions.

NOTE: Since the telltale breast concavity is more apparent during two-point suspension of the carcass and breast muscle can also be more readily exposed at this point, the first sign of involvement should prompt an examination for incidence at a location on the line where such suspension is practiced.

* * *

(m) Melanosis

Carcasses with small skin melanin deposits may be passed. Large deposits require removal and condemnation of affected tissues.

Certain breeds--Barred Plymouth Rock Chickens, Bronze Turkeys, etc.--normally show large melanin amounts in skin, shanks, etc. Small melanin deposits in the skin may give a greenish cast that should not be mistaken for "green struck" (decomposition).

Melanin may accumulate in certain tissues with age (guineas). Dark pigmentation of connective tissue and periosteum of cervical and thoracic vertebrae, and ribs is frequently observed in some bronze turkeys. If exposed to sun, some "bare back" turkeys may develop "blue backs," a condition similar to tanning of human skin that should not be considered pathologic.

(n) Parasites

Yellowish calcareous nodules in the subcutaneous tissue are parasitic lesions of a mite (*Laminosioptes cysticola*), occasionally seen in all poultry classes.

Carcasses may be passed after complete skinning and removal of affected tissues.

(o) Cadaver

Poultry dead from causes other than slaughter are "cadavers." Improper slaughter cuts, inadequate bleeding time, etc., may result in birds entering the scald water with insufficient bleeding or while still breathing (drowning).

Cadavers show: light red to deep cherry red skin, enlarged visceral blood vessels, congested heart, liver, and spleen.

Cadavers must be condemned and recorded on Form MP 514.

Note: Ducks - The slight visceral congestion in waterfowl is considered a physiologic variation, not to be used as indication of cadaver.

(p) Decomposition

It may be characterized by dull-gray to green struck appearance; slimy, sticky tissues; stale, musty, sour, or putrid odor. Washing to remove such odor is unacceptable.

Carcass disposition shall be as required by regulations (381.93).

Rancid fat. When the normal fat color is changed from bright yellow to white, and the odor is fruity, stale, or musty, fat shall be condemned.

(q) Emaciation

Carcasses with emaciation shall be condemned and recorded under septicemia and toxemia. Mere leanness should not be confused with emaciation.

(r) Tuberculosis

Specimens from young poultry suspected of tuberculosis shall be sent to the Microbiology Laboratory, P.O. Box 348, Beltsville, Maryland 20705.

Change 75-4

(s) Septicemia, Toxemia

They are generalized conditions, characterized by cyanosis, hyperemia, anemia, edema, dehydration, etc., and/or localized inflammatory lesions. Individually these signs may be the result of localized conditions, not always justifying carcass condemnation.

Fat discoloration on the heart's coronary band and thigh's anterior edge may indicate septicemia when associated with other pathologic lesions. Such discoloration may vary from pale red to brownish red.

Various degrees of fat discoloration, frequently observed in healthy roosters or tom turkeys, are considered physiologic.

(t) Synovitis

Inflammation of synovial membranes, caused by injury, nutritional deficiency and/or micro-organisms. Synovitis may involve one or all synovial membranes and adjacent tissues, and may be associated with lesions in one or more organs. *

Swollen joints from mechanically impaired circulation should not be confused with synovitis. *

Carcasses with localized synovitis may be passed for food after removal of affected tissues; those with systemic change shall be condemned.

(u) Airsacculitis

Inflammation of air sacs resulting in formation of an exudate which may be seen in the air sacs and their diverticuli or in other areas if the air sac membrane is ruptured. *

* * *

(1) Disposition criteria.

a. Carcasses showing airsacculitis with evidence of systemic changes require condemnation of the carcass and its parts. *

b. If the exudate in the air sac is so extensive or of such a consistency that preparation of a wholesome *

... or parts cannot be accomplished, it interferes with proper carcass condemnation judgment, the entire carcass shall be condemned.

If a and/or b. does not apply, carcasses or parts of carcasses shall be passed for food after complete removal and condemnation of all affected tissue and exudate.

(2) Salvage of portions.

a. Poultry portions may be salvaged provided the operation, approved by the circuit supervisor, is done sanitariously with continuous product flow and without pileup or delay.

b. Salvaged portions are chilled immediately with ice in continuous drained tanks.

The inspector in charge shall assure that all requirements of this section are met. Plant failure to comply with such requirements will result in discontinuing salvage operations.

(v) Leukosis

Since gross lesions of leukosis are evidence of systemic disturbance, affected carcasses shall be condemned.

Gross lesions may appear in one or more tissues. However, organ enlargement may not necessarily be evidence of leukosis.

(1) Inspector's authority. Line inspectors are trained to recognize leukosis lesions and, under veterinarian's supervision, they are permitted to condemn carcasses affected with such lesions. However, they shall retain any questionable carcass for veterinarian's disposition.

(2) Affected organs, tissues. Leukosis lesions vary in size, shape, location, color, etc. Following are the most common lesions, organs, or tissues involved.

- (i) Liver, spleen, kidney, lung, pancreas, intestine, heart, gizzard, proventriculus, (stomach).

Whitish gray (lymphoid tissue) masses, fairly uniform and oval, single or multiple, occurring in one or more organs. Lesions may vary in size up to an inch or more and may involve the entire organ or be imbedded in the organ requiring palpation for detection.

One lesion smaller than one millimeter in size cannot be positively identified as leukosis. When such a lesion is observed, other evidence should be present for condemnation.

Liver lesions may be spread throughout the organ causing size increase and change in texture and color. In this case individual tumors may not be noticeable.

(ii) Ovary. Ovaries appear cauliflower-like, with thickened folds and reduced granular appearance. They are moderately to greatly enlarged and easily broken apart.

(iii) Testicle. Testicles may appear as solid tumors, enlarged, irregularly shaped, and lumpy with whitish gray lesions.

(iv) Muscle. Lesions may appear as solid tumors, or they may be mushy when necrotic. They may show a yellowish or grayish discoloration.

(v) Skin. Skin leukosis appears as enlargement of feather follicles, common on legs, breast or neck, but it may be on entire body. These nodules may be pearly, yellowish, or grayish.

When carcass cuticle is removed with hard (hot) scald or barking, color contrast of nodule is increased. When scattered follicles are affected, feather tract pattern appears disrupted mostly on legs.

Lesions may vary in size. They may be extensive, coalesce, and become ulcerous.

Reddening of follicles alone should not be confused with leukosis.

(vi) Nerve. The nerve is enlarged, misshaped, and discolored with loss of cross striations. One or more nerves and ganglia may be affected in varying degrees.

(vii) Osteopetrosis. Long bones are usually involved which show general enlargement of bone shaft. Bone thickening may be so extensive to fill in the marrow cavity. In advanced cases, this brittle bone will break smoothly instead of roughly as in normal bone.

(w) Ornithosis

Lesions of ornithosis are not pathognomonic nor constant. Positive diagnosis may be done by laboratory only. The following gross lesions may be observed:

Nares--mucopurulent exudate.

Air sacs--fibrinous plaques or fibrinopurulent exudate over air sacs and serous membranes.

Liver--enlarged, yellowish with greenish or brownish mottling; petechial and yellowish foci.

Heart--enlarged and flabby with accumulation of pericardial fluid.

Spleen--enlarged with yellowish necrotic foci.

Kidneys--swollen and pale.

Inspector's responsibility. In an outbreak of ornithosis or any reportable disease, the inspector in charge is responsible for all reporting requirements and actions described in 9.17 (c). He shall be familiar with regulations concerning use of cresylic disinfectants as required by "Interstate Transportation of Animals and Poultry, Regulations and Laws Administered by APHIS."

Inspectors shall cooperate with Federal and State authorities in ornithosis outbreaks involving poultry moved into official plants. Cleaning and disinfecting live poultry equipment will be done by cooperating with responsible Federal personnel and by working under their direction.

(y) Erysipelas

Most characteristic lesions are petechiae or diffuse hemorrhages in tissues and organs. Liver is enlarged, congested, often friable or mottled, and may contain necrotic foci. Kidneys may be enlarged and congested. Lungs may be congested or brownish. A catarrhal exudate containing blood may be in the intestine; intestinal wall may be inflamed, edematous, hemorrhagic, or even necrotic. "Snood" (leader) may be enlarged and ulcerated. Skin lesions may also be observed.

BYPRODUCT REINSPECTION (MEAT)

Subpart 11-C
(Regs: M-310,311)

11.9 PRODUCT HANDLING

To minimize contamination possibilities, accumulations of unworked product shall not be permitted.

Byproduct for edible use should be placed on cages or trucks with removable metal drip pans beneath, or otherwise suitably conveyed to the cooler, it shall be chilled promptly.

11.10 PHARMACEUTICAL PRODUCT

Such product should be handled and stored without interfering with the preparation or inspection of edible product, and without causing sanitation problems.

Pancreas from viscera condemned for other than pathologic conditions may be saved for pharmaceutical purposes, provided salvagin is done under inspector's direct supervision.

11.11 ABNORMALITIES

The inspector shall carefully examine organs and products for contamination or abnormalities. Possible variations found during this inspection are described below.

(a) Cheeks

Cattle--Contamination, parasites cysts, eosinophilic myositis.

Calves--Contamination, ear tubes hide.

Sheep--Contamination, ear tubes wool pieces.

Swine--Hair, teeth marks, broke teeth, ear tubes, tonsils, rosin.

(b) Poll Meat

Cattle--Hair, contamination, bruises

(c) Lips

Cattle--Hair sores, tooth cuts infection, contamination.

Calves--Hair sores, tooth cuts, contamination, hide pieces.

Swine--Hair, bruises, scurf, rosin, rings, ring holes.

(b) Brains

Cattle--blood clots, bone splinters. Brains contaminated with foreign material--hide, hair, bone, etc.--from stunning or otherwise shall be condemned.

Calves--Blood clots, bone splinters.

Swine--Bone splinters, contamination.

- * Brains may be saved for edible
- * purposes, including those from animals
- * stunned with a penetrating captive
- * bolt stunner. Large blood clots,
- * bone splinters, and gross contaminants
- * must be rinsed away or manually
- * removed before brains are placed in
- * any communal washing or chilling
- * equipment. A plant employee shall
- * inspect the finished product for bone
- * splinters and other contaminants.
- * Inspection personnel will review the
- * finished product periodically for
- * contaminants to assess the adequacy of
- * the plant inspection.

(e) Tongues

Cattle--Hair, tonsils, hide, contamination, hair sores, foreign bodies, ulcers, abscesses, actinobacillosis.

Calves--Tonsils, hair sores, abscesses, foreign bodies.

Sheep--tonsils, lacerations, abscesses, hair sores, contamination, stain. Stained tongues should be scalded to remove the mucous membrane.

Swine--Tonsils, contamination, parasites, lacerations, punctures, stains, abscesses, mucosa (improper scalding and removal).

Many swine tongues are lacerated, mutilated and soiled during dressing procedures (from beaters of dehairing machines). All lacerations and punctures must be removed. Tongue trimming and removal of mucous membranes, when required, should be done during dressing operations.

(1) Tongue scalding (swine). Since pork tongues are commonly affected with thread worms, all tongues used in meat food products or labeled as "Pork Tongues" for shipping shall be scalded and have the mucosa completely removed.

Unscalded pork tongues may be shipped, provided they are labeled "Unscalded Pork Tongues." They must not be used as edible product unless scalded.

(2) Tongue inspection (swine).

Pork tongues shall be inspected for abscesses as follows:

(i) Sows, stags, boars.

Plant employees shall thoroughly palpate and incise tongues from sows, stags, or boars in the ventral surface of the base or fleshy part through the midline. The incision does not have to extend through the dorsal surface.

A tongue with an encapsulated abscess may be saved for food, provided affected tissue is removed and tongue is not contaminated during trimming.

(ii) Other swine. Soon after tongue removal plant employees shall thoroughly palpate all tongues from swine other than sows, stags, or boars. Tongues with abscesses shall be disposed of as described above.

(ii) Inspector's responsibility.

While tongues are still warm, the inspector shall examine (by palpation) about 10 percent of those passed by plant employees. If an abscess is found, all tongues previously prepared during the day should be reinspected and incised by plant employees, if considered necessary.

(f) Ears, Snouts, Head Fat

Swine--Hair, bruises, scurf, rosin, rings, ring holes.

(g) Stomachs

Stomachs saved for food purposes shall be emptied * * * soon after removal from carcasses without exposing outer surfaces.

Deficiencies--Contamination, parasites, abscesses.

When pork stomachs are not emptied, inner and outer surfaces must be presented for inspection.

(h) Chitterlings

Deficiencies, nodules, excessive fat, ileocecal valve. Chitterlings shall be free from contamination on both surfaces. Excessive fat and

ileococcal valve shall be removed. If unsplit, inner and outer chitterling surfaces must be presented for inspection.

(i) Hearts

Cattle--Blood clots, eosinophilic myositis, cysts.

Swine--Incomplete openings, blood clots.

(j) Livers

Cattle--Parasitic lesions, sawdust, telangiectasis, cirrhosis, abscesses, flukes, carotenosis, echinococcus.

Sheep--Parasites, cysts, scars, abscesses, flukes.

Swine--Parasitic lesions, abscesses, contamination.

(k) Spleens

Swine--Parasitic lesions, contamination, etc.

(l) Kidneys

Those to be used in meat food products shall be freely sectioned and thoroughly soaked and washed.

Swine--cysts, worms.

(m) Weasands

Cattle--Contamination, cysts, eosinophilic myositis.

Swine--Contamination, parasites. Weasands must be split and washed.

(n) Tails

Cattle--Hide, feces, hair, rectal mucosa.

(o) Feet

Swine--Scurf tissue, hair, claws, dehairing machine cuts.

(p) Ham Facings

Swine--Scar tissue, abscesses, bruises, hair, feces, spermatic cords.

(q) Caul Fat

Sheep--Bladder worms, nodules, abscesses, contamination.

(r) Ruffle Fat

Sheep--Intestinal pieces, abscesses, parasites, contamination.

Swine--Intestinal contents, intestinal pieces, thorn head worms.

(s) Crown (Bung) Fat

Swine--Hair, feces, genital organ sections.

(t) Rennet

Calf abomasum used to produce rennet need not be thoroughly cleaned. They may be emptied of their contents in edible product departments, provided the operation does not create a nuisance. Containers shall be marked "Calf Rennet Inedible."

CARCASS REINSPECTION

Subpart 11-D

(Regs: M-310, 311; P-Subpart A, K)

Carcass reinspection is necessary to assure high cleanliness standards and uniform sanitary dressing procedures.

11.14 CATTLE

ACCEPTABLE QUALITY LEVEL (AQL)

This is a special carcass reinspection procedure done after dressing operations and routine post-mortem inspection. It is based upon (1) selecting and identifying sample units or groups at sample identification point according to sampling plans; (2) inspecting selected samples, and identifying and classifying defects according to standardized criteria; (3) evaluating defects using accept-reject (Ac-Re) criteria; (4) applying sample inspection results to

corresponding carcass lots or sublots.

AQL also provides valuable information on origin, extent, and nature of carcass contamination.

(a) Application

AQL is applicable to plants slaughtering more than 25 cattle a day, is optional to plants slaughtering 25 or less a day, and not applicable to beef carcasses intended for inplant boning subject to "Boneless Beef Reinspection."

(b) Responsibility

(1) Plant. Management shall fully cooperate with the inspector and provide (1) separate rail area for inspection; (2) safe and adequate lighting (50FC) on carcass surfaces at sample identification point and reinspection station; (3) safe platform with functional brake or self-locking wheels; (4) hand rails on stairs and around top platform; (5) tags or other means for adequate lot and sample identification; and (6) competent help.

(2) Inspector. He shall (1) cooperate with the plant selecting the best applicable reinspection method and sampling plan subject to approval by the circuit supervisor; (2) inspect sample units thoroughly; (3) record, total, and evaluate all defects; (4) accept or reject lots represented by samples; (5) reinspect rejected lots after reconditioning; (6) prepare and mail reports.

(c) Terms

Lot - Number of half carcasses designated for AQL inspection.

Sublot - Designated part of a lot.

Sample Unit - Half carcass selected for inspection.

Sample Group - Three sample units.

Sample Identification Point - Designated place for selection of sample units.

Defects - Errors in dressing procedure related to carcass cleanliness.

(d) Lotting

Lot designation may be based on:

1. Total daily kill. Use of largest possible lots is economical for both plant and inspection manpower. It tends to avoid shipment delay if carcasses are clean.

2. Partial daily kill. Some plants may designate the morning kill a lot and have it reinspected the same day, and the afternoon kill another lot and have it reinspected the next morning.

3. Type of cattle. Separate lotting of steers, heifers, cows, and bulls may be considered. It should make no difference whether cattle are reinspected by type or as one lot, unless sanitary dressing procedures vary with animal types. Sample units indicate quality of plant's dressing procedures when sample is identified on kill floor. If proper sanitary dressing procedures are followed, clean carcasses should be produced.

4. Work schedule. Lotting based upon plant's established shipping, cutting, or fabricating schedules also has some merit.

(e) Random Sampling

To reflect true condition of all carcasses in a reinspected lot, samples must be randomly selected.

(1) Random cards. They help to insure random selection of samples and avoid "second guessing." Attempts at random selection without aids (random cards) are usually unsuccessful. Each random card is different and consists of three columns of random numbers to the left, and 12 columns of 25 random times of day to the right.

Tables 11.3 and 11.4 show random cards marked for lots of 450 beef sides. Table 11.3 shows sample selection in Stationary Plan and Table 11.4 in Online Plan.

(2) Use of cards. The inspector should:

1. Shuffle cards to use different

Table 11.3 - Sample selection in stationary plan

RANDOM NO.			RANDOM TIMES											
			(2)		(2)					(2)			(2)	
9	17	20	700	804	900	1000	1103	1201	100	200	300	403	500	601
35	27	53	703	805	900	1001	1104	1203	101	203	302	403	506	603
8	52	20	705	807	901	1004	1107	1204	105	207	304	405	509	603
51	45	12	709	809	904	1005	1107	1204	105	212	304	405	510	606
9	17	15	710	812	904	1005	1108	1204	110	214	305	405	512	606
68	12	5												
8	50	17	712	816	915	1006	1112	1209	111	218	308	411	512	608
64	20	26	714	817	923	1008	1115	1210	118	219	319	413	517	611
47	44	45	715	820	924	1013	1115	1210	120	219	320	413	518	616
11	7	10	715	821	925	1016	1115	1211	121	220	321	414	524	617
68	36	19	721	826	927	1019	1116	1212	122	226	323	415	524	618
58	26	49												
64	3	60	721	829	928	1029	1116	1214	125	227	325	416	526	619
53	52	37	724	829	929	1029	1117	1217	126	228	326	419	529	622
28	38	45	727	830	932	1029	1124	1223	129	229	328	423	533	624
66	52	62	727	831	933	1052	1130	1228	134	235	329	423	540	625
41	36	50	727	833	934	1034	1131	1229	136	237	330	427	542	625
53	17	36												
42	8	19	729	834	935	1035	1132	1229	139	238	334	428	543	626
37	50	35	735	835	938	1041	1134	1231	139	238	334	429	543	628
29	66	61	735	836	942	1048	1135	1235	145	239	335	444	543	629
47	9	39	736	838	945	1051	1139	1240	145	241	337	444	544	633
17	23	56	741	840	945	1052	1140	1241	149	241	340	447	546	636
62	50	9												
55	33	40	742	854	945	1052	1143	1244	150	244	340	447	547	641
13	60	39	745	855	947	1057	1152	1246	152	252	341	452	551	641
36	66	6	752	857	952	1057	1152	1246	152	256	350	456	553	652
57	13	41	757	857	955	1058	1154	1251	153	259	351	457	555	659
83	4	6	759	858	959	1059	1157	1252	158	259	359	458	556	659

$4 + 25 + 20 + 25 + 10 + 25 + 25 + 20 + 25 + 9 = 188$ (3)

Table 11.4 - Sample selection in online plan

RANDOM NO.			RANDOM TIMES											
22	31	56	700	801	904	1000	1100	1202	100	202	300	402	502	602
59	54	63	701	807	914	1004	1104	1203	101	202	302	402	504	604
30	26	25	711	810	914	1005	1108	1205	103	204	302	404	505	604
49	67	31	713	812	915	1006	1108	1205	103	209	303	408	507	609
67	47	25	716	824	916	1010	1111	1212	106	209	304	409	513	609
62	27	16												
1	54	35	717	824	923	1011	1111	1213	107	210	309	409	519	612
23	66	52	721	825	928	1012	1112	1214	114	216	312	412	522	614
63	44	43	723	827	929	1015	1113	1218	117	221	316	413	524	616
67	14	27	723	828	929	1021	1116	1219	117	225	320	414	525	617
33	24	50	723	829	930	1021	1116	1221	119	228	320	418	525	628
56	51	1												
16	58	65	725	831	930	1023	1120	1222	120	229	323	424	525	631
10	21	36	730	832	931	1024	1121	1223	121	231	326	425	526	637
26	41	11	730	835	932	1026	1122	1227	123	233	335	427	529	638
37	56	44	735	836	935	1028	1123	1228	125	234	336	431	532	638
55	3	7	737	836	936	1033	1135	1229	126	235	339	432	534	639
31	36	3												
8	57	57	739	837	940	1034	1135	1234	126	237	340	433	535	641
35	39	56	740	838	942	1034	1139	1234	129	238	341	434	538	641
58	48	38	743	840	943	1038	1140	1236	140	240	348	434	540	644
68	59	20	743	846	947	1039	1147	1237	140	242	350	437	545	645
25	8	30	743	846	947	1040	1148	1237	140	244	353	440	545	648
38	60	18												
38	19	50	745	848	949	1042	1149	1238	145	246	354	441	551	648
57	22	35	750	852	955	1044	1152	1243	146	247	356	442	552	649
7	3	19	752	857	958	1050	1156	1248	147	251	356	442	553	650
17	52	34	755	858	958	1051	1156	1249	153	253	357	443	558	650
10	34	38	757	858	959	1052	1158	1254	156	259	359	444	559	652

$5 + 25 + 22 + 25 + 15 + 25 + 25 + 19 + 25 + 9 = 195$

... day, and blindly pick one.
 ... on all times of day when
 ... are not passing the sample
 ... point on kill floor.
 ... times when carcasses are
 ... sample identification point
 ... 188; online sampling--
 ...

... determine required number of
 ... sides or groups from respective
 ... tables (stationary--14;
 ... sampling--6).

... establish sampling intervals.
 ... totals obtained in step 3 by
 ... numbers shown in step 4--

$$\frac{188}{14} = 14, \frac{195}{6} = 32;$$

... all fractions. Sampling interval
 ... stationary is 13 and for online
 ... sampling is 32.

... randomly select a starting point
 ... sampling by placing a pencil some-
 ... where on the three columns of random
 ... numbers to the left of the card and
 ... moving the pencil at random up or
 ... down. This number must be equal to or
 ... less than sampling interval. Sampling
 ... consistently with the first applicable
 ... time of day would be predictable; thus,
 ... contrary to random concept.

... Mark times of day for sampling.
 ... Use sampling intervals and count times
 ... of day equivalent to sampling
 ... intervals, beginning from first sample
 ... identified in inspected lot.

... Eliminate extra sample units, if
 ... necessary.

(f) Identification

Reinspected lots and selected sample
 properly identified.
 ... identification time
 ... identifies sam-
 ... fication
 point after carcasses are washed and
 shrouded. Preselected random times
 of day for actual identification of
 specific sample units must be known
 only by the selecting inspector.

Lot and sample unit identification
 devices shall be different from other
 plant identification devices.

(g) Routine Reinspection

It should be followed to: (1) avoid
 inadvertent overlooking of any carcass
 area or defects, (2) promote inspec-
 tion uniformity, and (3) use manpower
 efficiently.

(1) Beef sides. Sample units are
 examined in groups of two. First
 reinspect forequarter of first half
 and record defects; then go up the
 platform, examine first hindquarter,
 and record defects. Have plant
 employees push second unit over to
 the platform, examine hindquarter,
 and record defects. Come down the
 platform, examine second forequarter,
 record defects. Repeat examinations
 in groups of two until all units
 have been reinspected and recorded.

(2) Beef quarters. Quarter rein-
 spection may be considered, provided
 adequate facilities are available.
 However, fore- and hindquarters must
 be identified as part of sample unit.
 They need not be reinspected together,
 but must be examined according to
 reinspection standards.

(h) Sampling Plans

Chart 11.1 shows the relation of
 various AQL plans.

(1) Initial reinspection.

(i) Stationary lot sampling plans

(Table 11.5). Sample units are
 randomly selected at sample identi-
 fication point, identified, and
 segregated in designated cooler area
 (reinspection point) for inspection
 at later date (often next day).

Single. It is designed for small
 lots with 100 or less carcass units.
 In single plan a lot is either
 accepted or rejected.

Double. This plan is more suitable
 for large lots. The accept-reject
 criteria are so designed that a "clean"
 lot is passed and an "unclean" lot is
 rejected upon results from a small
 part of total sample. If results of

first step sample are inconclusive, this plan provides for examining remainder of total sample. After completing the second step, the lot is either accepted or rejected.

(ii) Online sampling plan (Table 11.6). Sample units are randomly selected in groups of three, at sample identification point, and reinspected. Estimated total day's kill (working shift) determines number of groups.

If samples fail to meet AQL standards, carcasses represented by that group shall be rejected. Rejection method will vary with kill floor layout and inspector's workload.

Plants may devise systems (buzzers, bells, etc.) for inspectors to indicate to designated plant employees carcasses to be identified for sampling. Such systems should be acceptable to the inspector in charge.

Plant employees must not be aware of sample identification times until sample carcass reaches identification point.

(2) Reduced reinspection. It applies only to initial stationary and online sampling plans. Reinspection may be reduced:

1. Fifty percent, if 15 consecutive

lots are acceptable.

2. Seventy-five percent, if 30 lots are inspected without rejection.

Change reduction rate to 50 percent when lot is rejected in 75 percent reduced inspection (item 2). Revert to initial plan--stationary or online--when lot is rejected in 50 percent inspection (item 1).

(3) Plant's own reinspection. To comply with AQL standards, plant management may design and use its own reinspection system, provided it is approved by the area supervisor. To make this plan work effectively, plant management must (1) provide adequate space, lighting and personnel to clean carcasses; (2) check each carcass after cleaning and randomly divert samples of carcasses for plant control personnel to classify and record defects; (3) initiate immediate corrective action when number and/or type of defects so indicate; (4) provide means for recleaning carcasses failing acceptance criteria.

To confirm effectiveness of plant's system, the inspector shall sample and score 10 consecutive lots accepted by the plant, and evaluate his findings by using the following criteria:

1. If 10 lots are acceptable,

Chart 11.1 - Relation of plans

Initial plans	Reduced inspection	Rejected lots - plans	
Stationary lots table 11.5	When 10 consecutive lots accepted.	When any single lot rejected.	Stationary lot table 11.7.
Online table 11.6			Online table 11.8
Plant-own control	When 10 consecutive lots accepted, MPI monitoring at reduced rate; not less than one lot a week.	Within 10 consecutive lots One lot rejected - warning. Second lot rejected - disapprove and change to best suitable initial plan.	

Table 11.5 - Stationary lot sampling plans

Plan and lot size (sides)	Sample size (sides)	Critical		Major		Total	
		Ac	Re	Ac	Re	Ac	Re
Single: 100 or less	3	1	2	4	5	12	13
Double: 101-250							
Step 1	4	0	3	3	7	12	17
Step 2	<u>3</u>						
Total.....	7	2	3	8	9	24	25
251-500							
Step 1	7	1	5	4	10	18	28
Step 2	<u>7</u>						
Total.....	14	4	5	14	15	45	46
501 and up							
Step 1	10	1	6	6	13	26	37
Step 2	<u>12</u>						
Total.....	22	6	7	21	22	68	69

Table 11.6 - Online sampling plan

Number of sides per workshift (lot)	Sample size (sides)	Minimum number of sample groups per workshift (lot)	Criteria for each sample group					
			Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less <u>1</u> /								
101-250	3	4 (3x4=12)						
251-500	3	6 (3x6=18)	2	3	5	6	14	15
501 and up	3	8 (3x8=24)						

1/ Use initial stationary plan in lieu of online.

2. If one of 10 consecutive lots is rejected, notify plant management that the system does not produce acceptable carcasses. After correcting defects, sample toward 10 consecutive lots.

3. If a second lot is rejected within 10 consecutive lots, retain such lot for reconditioning and disapprove plant's sampling system. To reestablish the system, plant management must submit a new procedure showing proposed deficiency corrections.

(4) Rejected lot reinspection. Carcasses rejected on initial inspection must be reconditioned and reinspected using one of the rejected lot sampling plans. Rejected lot sampling plan selected must be acceptable to plant management and circuit supervisor.

Rejected lot plans are used as the sampling plans for initial reinspection. However, they have different acceptance levels to determine whether rejected lots were satisfactorily reconditioned. Rejected carcasses need not be assembled and inspected as one lot, provided lotting and reinspection arrangements are acceptable to the circuit supervisor.

(i) Lotting. Chart 11.2 shows various situations and possibilities for lotting and regrouping rejected lots.

(ii) Stationary plans (Table 11.7). Estimate number of rejected carcass units to determine lot sizes, which must be agreed upon by plant management and circuit supervisor. Randomly select required number of sample units to provide for second step inspection, if needed; inspect samples, record and total results; accept or reject the lot. If accepted, the lot is released; if rejected the lot must remain under rejection until it has been reconditioned and accepted on

subsequent inspection. At this point, the "twice-rejected" carcasses may be relotted with circuit supervisor's approval.

(iii) Online plan (Table 11.8). Estimate number of rejected carcass units to determine lot sizes in "work shifts." To use random cards for selecting lots and sample groups, the inspector needs to know (1) estimated time to recondition rejected carcasses, (2) starting and ending time of day, (3) times of day of regularly scheduled breaks, (4) number of rejected sides. As reconditioning progresses, identify sample groups at preselected times of day; inspect them promptly; identify, record and total defects on Form MP 519 separately for each sample group.

If samples fail, product from lots represented by samples must be cleaned and regrouped for another online subplot, or lot reinspection.

(iv) Plant's own control. An approved plant control system must include a dependable sampling method to determine that rejected lots are properly cleaned before release.

(i) Defect Criteria

Carcass acceptance or rejection is based upon defects found on reinspection. To insure uniform defect evaluations, inspectors must apply same criteria.

Chart 11.2 - Lotting rejected lots

Initial inspection	Lot rejection	Reconditioning	Rejected lots inspection
Stationary lot or online sampling plan (table 11.5 or 11.6)	Sample rejected. All carcasses from corresponding lot rejected and positively identified.	As one large lot or broken into smaller lots (sublots) at discretion of circuit supervisor.	Stationary lot or online sampling plan (table 11.7 or 11.8) or both interchangeably on sublots at discretion of circuit supervisor.

(1) Chart 11.3. This chart shall be used for classifying all defects found on carcass reinspection.

(2) General classification.

(i) Minor. Defect that individually or in aggregate affects product appearance, but not its usability.

(ii) Major. Defect that individually or in aggregate materially affects product usability.

(iii) Critical. Defect that individually or in aggregate seriously affects product appearance and usability.

Table 11.7 - Rejected lots, stationary plans

Plan and lot size (sides)	Sample size (sides)	Critical		Major		Total	
		Ac	Re	Ac	Re	Ac	Re
Single:							
100 or less	3	0	1	3	4	10	11
Double:							
101-250							
Step 1	4	0	2	2	5	10	15
Step 2	<u>3</u>						
Total.....	7	1	2	6	7	21	22
251-500							
Step 1	7	0	3	3	8	15	25
Step 2	<u>7</u>						
Total.....	14	2	3	11	12	36	37
501 and up							
Step 1	10	0	4	4	10	20	31
Step 2	<u>12</u>						
Total.....	22	3	4	15	16	54	55

Table 11.8 - Rejected lots, online plan

Number of sides per workshift (lot)	Sample size (sides)	Minimum number of sample groups per workshift (lot)	Criteria for each sample group					
			Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less <u>1/</u>								
101-250	3	4 (3x4=12)						
251-500	3	6 (3x6=18)	2	3	5	6	14	15
501 and up	3	8 (3x8=24)						

1/ Use initial stationary plan in lieu of online,

Chart 11.3 - Defect criteria (for sample unit)

Kind	Description	Class	Remarks
Pathology	Other than broken rib, grubs, etc.	*Insignificant	Retain and notify supervisor.
Bruises Injuries	2 inches or less wide, 1 or less inch deep	*Insignificant	
	More than 2 inches wide, 1 inch or less deep	Minor	
	2 inches or less wide, more than inch deep	Minor	
	More than 2 inches wide more than 1 inch deep	Major	
Parasites	1 grub	Minor	
	2 - 3 grubs	Major	
	4 or more grubs	Critical	
Hair Loose	10 or less	*Insignificant	Scattered hairs on the hock are not to be accumulated with hairs found on remainder of half carcass.
Hock area only	11 - 25	Minor	
Carcass side (other than hocks)	10 or less	*Insignificant	Clusters on hock area are to be accumulated with clusters found on remainder of half carcass.
	11 - 25	Minor	
	26 - 50	Major	
	51 and more	Critical	
Clusters	1 - 2	Minor	Hair cluster: numerous hairs in a 5-inch area or too numerous to count over entire carcass side.
	3 - 4	Major	
	5 and more	Critical	
Hide	Less than 1/2 inch	Minor	
	1/2 to 3 inches	Major	
	Over 3 inches	Critical	
Oil Stains Grease	Less than 2 inches	Minor	Any drops or streaks of oil or grease on tendinous part of hock area will be scored as a minor defect.
	More than 2 inches	Major	
Rail dust Other similar specks.	10 or less	*Insignificant	Do not score branding ink as a defect.
	11 - 25	Minor	
	26 or more	Major	
Dressing defects	Less than 1/4 inch	As specks	
	1/4 - 2 inches	Minor	
	Over 2 - 4 inches	Major	
	Over 4 inches	Critical	
Improper trim	Pieces of organs, large clots in stick wounds, etc.	Minor	

*No significance in product wholesomeness. Do not score.

NOTE: A lot should not be rejected only for glass or metal fragments found on an isolated carcass.

(j) Accept-Reject Criteria

Sampling tables contain Accept (Ac) and Reject (Re) criteria for critical, major, and total (critical plus major plus minor) defects found on reinspection of samples and recorded on Form MP 519.

"Ac-Re" zones vary with lot and sample unit sizes in stationary lot sampling plans (Tables 11.5 and 11.7), and remain the same for sample groups in online sampling plans (Tables 11.6 and 11.8).

(1) Lot rejection. A lot shall be rejected if (1) number of critical or major defects equals or exceeds number shown in "Re" zone of respective defect class; (2) total number of critical, major, and minor defects is in "Re" zone of total defects column of sampling plan used on carcass reinspection.

(2) Examples.

1. Initial stationary lot, single plan--Lot of 90 beef sides, 3 sample units. Critical 2, minor 6 - Reject; critical 1, major 1, minor 9 - Pass.

2. Initial stationary lot, double plan--Lot of 200 beef sides; first step, 4 sample units. Critical 1, major 4, minor 6 - No disposition at this point; inspect 3 more sample units in second step. Minor defects 6 - Add defects of both steps. Total 17 - Reject.

3. Initial online sampling plan--Lot of 300 beef sides; 6 sample groups of 18 sample units. Critical 1, major 7, minor 3 - Reject; critical 1, major 4, minor 5 - Pass.

(k) Report

Form MP 519 shall be used for reporting AQL results. See Part 20.

11.15 POULTRY INTERIM PROCEDURE

(a) Objective

After post-mortem inspection, poultry carcasses shall be reinspected at

slaughtering plants to comply with regulation (free from protruding pinfeathers), and to insure ready-to-cook condition of poultry before shipping, wrapping, packaging, and further processing.

(b) Sampling

Samples shall be randomly selected and reinspected daily before packaging. The sampling and reinspection procedure shall be followed as outlined in MPI Directive 918.1.

(c) Reporting

Forms MP-16, 16-1, and 437 shall be used in lieu of MP-215. Form MP-16, Online Inspection of Ready-to-Cook Poultry, and Form MP-16-1, Online Inspection of Ready-to-Cook Necks and Giblets, shall be used for reporting deficiencies and corrective actions taken on poultry reinspection at slaughter plants. At further processing plants, conditions other than ready-to-cook shall be recorded on MP-437, Notice of Unclean and Unsound Product.

BIOLOGICAL RESIDUES

Subpart 11-E

(Regs. M-301, 309, 311, 318;
P-Subpart A, J, K)

Under FO direction, tissues from livestock and poultry carcasses are monitored for possible adulteration with biological residues. Such monitoring includes any substance or metabolite, from animal treatment or exposure, present in carcasses, parts, or organs.

11.18 MONITORING PROGRAM

This program consists of an "objective" and a "selective" phase.

(a) Objective Phase

This phase is designed to randomly select and analyze tissues for possible residues from livestock or poultry carcasses passed for food. It provides information on incidence, trends, compliance, and control.

Sampling. FO will provide instructions for each sampling plan and, based upon statistical studies, will determine number of samples, tissue type, and sampling time.

The inspector shall collect tissue samples from randomly selected carcasses of animals (livestock and poultry). Day and time of sampling must vary to avoid routine sampling patterns.

Each tissue must be placed in a separate plastic bag to prevent transfer of residue from tissue to tissue.

One laboratory form (MP 23) shall be completed for samples from each carcass. Such form shall include owner's or grower's name and address; tissues submitted, analytical test requested, and animal species or poultry class.

Samples must be shipped to arrive at the laboratory in good condition.

* * *

(b) Selective Phase

In this phase tissue samples are analyzed for specific residues when residue problems exist in certain areas. The selective phase is in conjunction with regulatory control action designed by FO to eliminate residues in edible tissues.

Inspector's responsibility. When ante-mortem signs indicate poisoning or conditions possibly resulting in unacceptable residues in tissues, the inspector shall: (1) hold the animals (livestock or poultry) and notify his supervisor immediately; (2) record and evaluate all signs; (3) obtain complete history on the chemical or drug used; and (4) follow instructions from RD through area supervisor on sampling and dispositions.

When post-mortem signs indicate poisoning, injection lesions, or abnormalities possibly resulting in unacceptable residues, the inspector shall: (1) retain carcass and edible parts and, if a great number of carcasses is involved, notify his supervisor immediately; (2) complete required laboratory form, including name and address of owner or grower, treatment history, tissues submitted, test requested, animal species or poultry class, retain tag number, requested tests from other laboratory, etc.; (3) collect the following tissues when injection lesions are detected in poultry: (a) affected part when lesion is in an extremity (neck, wing, or leg); (b) breast with back part, when lesion is in body (back or breast); (c) normal muscle (unaffected wing or leg, breast, liver, kidney); (4) place each tissue in separate plastic bag; and (5) freeze, pack, then ship frozen with dry ice to laboratory.

11.19 CHEMICAL POISONING

Presence of enlarged livers, nephritis, organ congestion, or similar signs of a toxic condition in lot of animals presented for slaughter should alert inspectors to a possible residue problem.

Charts 11.4 and 11.5 show signs of potential chemical poisonings and residues in livestock and poultry.

11.20 CHEMICAL RESIDUES

(a) Insecticides

(1) Chlorinated hydrocarbons. These compounds accumulate and are stored in animals' fat, and act as stimulants or depressants of central nervous system. They include aldrin, benzene hexachloride, chlordane, dieldrin, endrin, heptachlor, lindane, methoxychlor, and toxaphene.

(2) Organo-phosphates. They inhibit acetylcholinesterase and other cholinesterases. Their biological action results from acetylcholine accumulation at nerve endings, causing first stimulation and then paralysis of all nerve synapses and motor endings, except termination of sympathetic fibers.

The organo-phosphates include parathion, methylparathion, rommel, malathion, ethion, dioxathion (Delnav^R), mevinphos (Phosdrin^R), and naled (Dibron^R).

An analytical method is available to identify entire group of organo-phosphates; however, the inspector should designate one of them, if the laboratory in determination on

(3) Carbamates. Many carbamic esters have pesticidal action. Like the organo-phosphates they inhibit cholinesterase. Most common carbamates are carbaryl (Sevin^R) and pyrolylan (Pyrolylan^R).

(b) Fungicides

These compounds are widely used for treating seed grains. Treated grains, used for feeding animals raised for food (livestock or poultry), cannot be diverted without approval.

Since residue tolerance is not established in meat or edible organs from livestock or poultry fed treated seed grains, such practice is considered unsafe.

An established screening method is not available; thus, the inspector should designate the fungicide to be analyzed.

Some commonly used fungicides are: captan, thiram, ceresan M^R, and zineb.

(c) Herbicides

They include: ammate, borax, dinitro-compounds, chlorobenzoic acids, arsenicals, sodium chlorate, phenols, and hormone types. Herbicides and other chemicals are widely used to control undesirable plants.

(d) Metals

(1) Arsenic. It is used as a component of pesticides, herbicides, and in combination with sodium, copper, and lead. It remains in the soil for long periods.

Arsenicals may be safely used in feed for poultry raised for food production when used according to established dosages and withdrawal periods.

(2) Lead. Metallic lead and its alloys and salts frequently produce poisoning in cattle. Most animals are susceptible, but swine and goats appear rather resistant. Sources of lead are paints, pesticides, wet cell batteries, industrial contamination, etc.

(3) Mercury. This is a cumulative poison and is found in fungicides, antiseptics, and corrosives (mercuric chloride).

Chart 11.4 - Chemical poisoning (livestock)

Type	Signs	
	Ante-mortem	Post-mortem
Insecticides: Chlorinated hydrocarbons	Restlessness, anorexia, polyuria, abnormal postures, salivation, muscular spasms, trembling, shivering, stiff and exaggerated gait, convulsions, depression, coma.	Organ congestion (lungs, liver, kidneys), lung edema; hemorrhages on epicardium; blood-tinged froth in trachea and bronchi; congestion and edema of brain and spinal cord, gastro-enteritis (oral ingestion); organ degeneration (chronic).
Organo-phosphates and carbamates	Salivation, dyspnea, restlessness, stiffness, abdominal pain, diarrhea, convulsions.	Nonpathognomonic; hemorrhages in heart, lungs, gastro-intestinal tract; edema and congestion of lungs.
Fungicides	Nasal discharge, colic, diarrhea, stilted gait, rapid respiration, depression, coma.	Nonspecific: Blood-tinged fluid in abdominal and thoracic cavities; liver and kidneys degenerated; hemorrhages in heart, lungs, gastro-intestinal tract.
Herbicides	General depression, anorexia, rumen atony, muscular weakness, diarrhea.	Nonspecific: Undigested feed; gastro-intestinal tract with ulcers and necrotic foci; liver, kidney, and lung inflammation.
Metals:		
Arsenic	Salivation, thirst, vomiting, muscle twitching, tremors, staggering gait, colic, diarrhea (hemorrhagic), paralysis, coma.	Hemorrhagic gastro-enteritis; intestinal edema; inflammation and ulceration of liver.
Lead	Acute: Depression, muscular weakness, walking in circles, head against objects, paralysis of masseters, muscular twitching, grinding teeth, bellowing, vomiting, diarrhea, blindness, convulsions. Chronic: Anorexia, depression, constipation, muscular weakness, prostration, brisket and leg edema.	Acute: Hemorrhagic gastro-enteritis; pale and degenerated liver with necrotic areas; subepicardial and subendocardial hemorrhages. Chronic: Yellow liver with lobule degeneration; scattered hemorrhages in kidneys, heart; atrophy of laryngeal muscles (horses); kidney degeneration.
Mercury	Acute: Vomiting, bloody diarrhea, polyuria, anuria, increased respiration, shock. Chronic: Weakness, depression, incoordination, muscle spasms, posterior paralysis, anemia, anorexia, diarrhea, polyuria, anuria, blindness.	Acute: Ash-gray mucosa of mouth, tongue, pharynx, esophagus (caustic action); ulcers of gastro-intestinal tract; hemorrhages in nose, lungs, kidneys, liver, subperitoneal tissues, dark red blood with slow coagulation. Chronic: Pale organs; ulcers in gastro-intestinal tract; necrotic and hemorrhagic areas in liver; nephritis; splenitis.
Selenium	Acute: ("Blind Staggers"): Labored breathing; staggering; dilated pupils; paralysis of throat and tongue; prostration. Chronic ("Alkali Disease"): Lameness; cracked hoofs; joint stiffness; hair loss; emaciation.	Acute: Congestion and hemorrhages of lungs; epicardial petachiae; congestion and ulceration of omasum. Chronic: Articular surfaces of long bones with erosions; heart atrophy; liver cirrhosis.

Chart 11.5 - Chemical poisoning (poultry)

Type	Signs	
	Ante-mortem	Post-mortem
Insecticides:		
Chlorinated hydrocarbons	Nervous chirp, hyperexcitability, dyspnea, tremors, convulsions and prostration. Mucous nasal discharge. Atrophic, cyanotic comb and wattles.	Amber fluid in pericardial sac. Enlarged heart with distorted coronary vessels. Congestion of liver and kidneys. Degeneration of gizzard lining and muscular ecchymosis. Ascites.
Organo-phosphates and carbamates	Ataxia, ventral recumbency cyanosis, depression, blood tinged diarrhea, mucous discharge from beak, tremors, clonic convulsions, increased salivation and lacrimation.	Dark, congested heart, injected subcutaneous vessels.
Fungicides	Stilted gait, slipped tendon, splayfoot, enlarged hocks, curled or crooked toes, ventral recumbency, abnormal curvature of femur and tibio-tarsus.	Specific for compound used.
Herbicides	Depression, anorexia, muscular weakness.	Specific for compound used.
Metals:		
Arsenic	Restless, spasmodic, jerking of neck and loss of equilibrium. Depraved appetite.	Submucosal crop and gizzard inflammation, catarrhal enteritis, severe kidney degeneration.
Lead	Anorexia, emaciation, polydipsia, muscular weakness, drooping wings, greenish feces.	Hepatic and renal degeneration, enteritis, hepatic and cardiac atrophy, hydropericardium, gall bladder hypertrophy, ureates in kidney, greenish brown colored gizzard mucosa.
Mercury	Incoordination and progressive muscular weakness. Depression, diarrhea.	Gray areas in mouth and esophagus, catarrhal inflammation and necrosis and sloughing of mucosa of proventriculus and intestine. Pale kidneys with white foci, fatty degeneration of liver, greenish fluid in gastro-intestinal tract and abdominal cavity.

(4) Selenium. Intoxication (Alkali Disease) results from insecticides or seleniferous soil, water, or plants (Rocky Mountain and Great Plains areas).

(5) Analytical method. A method to identify each metallic element is not available. Therefore, the inspector should indicate signs and elements suspected.

(e) Antibiotics; Drugs

Antibiotics are used in feed of young animals to promote growth. Antibiotics or drugs are used for disease prevention or treatment. However, when improperly used on livestock or poultry, they result in tissue residues.

Drugs--hormones, tranquilizers, anthelmintics, antibiotics, etc.--are useful when properly used, but some may mask signs of diseases or abnormalities, or may be in tissues after slaughter.

Inspectors on ante-mortem inspection must be alert to the possibility of drugs masking signs of sick animals (tranquilizers in nervous diseases, antibiotics in diseases with pyrexia). Swellings in muscular regions, medicinal or chemical odors, and other abnormalities associated with drug administration are important aspects of ante-mortem inspection.

Muscle lesions, discoloration of subcutaneous tissue, and medicinal, chemical, or other foreign odor are possible post-mortem findings associated with drug residues.

Antibiotic injection lesions may appear as oily, viscous, opaque yellow material.

Since trimming affected areas does not assure that carcass and viscera are free from residues, all carcasses with injection lesions suspected of being caused by antibiotics must be retained and disposed of according to laboratory findings. All available information should be sent to the

laboratory with the sample--ante- and post-mortem signs, animal's origin, number in lot, number of animals affected, antibiotic(s) suspected, dosage, manufacturer's product name, etc.

(f) Sampling Imported Product

A sampling program is necessary to monitor imported meat and poultry products for biological residues. FO will furnish number and type of samples to submit and period during which they will be collected.

Samples will be selected at random from products regularly imported. Each shipment sampled should, if possible, have a different point of origin. Samples must be frozen and submitted with a completed MP Form 23, Laboratory Report, to the Chemical Control Laboratory servicing the area. Do not mail samples to arrive at the laboratory on weekends or holidays.

Bulk-packed products. Randomly select three shipping containers from an inspection lot and take 1 pound of product from each. Grind and mix the three samples, and submit 1 pound of the resulting composite to the laboratory.

Certain product characteristics make it difficult to obtain a fat sample and 2 pounds of meat can be substituted for 1 pound of fat. Submit 2 pounds of the 6-pound ground and mixed meat composite to the laboratory.

Canned product, miscellaneous processed product, institutional size packages. Select a minimum of three units from three separate, randomly selected cases in the inspection lot. Grind and mix 2 pounds of solid product from each of the three different units into a 6-pound composite and submit 2 pounds to the laboratory. When weight of product in each unit is less than 2 pounds, select more units.

* (2) Sampling. Noncertified animals
 * may be held by the plant, under MPI
 * control, until the required withdrawal
 * period is met, or they may be slaugh-
 * tered and their carcasses held until
 * representative liver and muscle samples
 * are analyzed for DES by a plant-
 * selected laboratory without cost to the
 * Government. The Director, Scientific
 * Services, reserves the right to dis-
 * approve the laboratory selected. The
 * inspector will send duplicate samples
 * to an MPI laboratory for monitoring,
 * and indicate in the "Remarks" section
 * of MP Form 23 the number of animals
 * involved and whether they were certi-
 * fied as meeting the withdrawal
 * period. Laboratory samples must be
 * taken as shown in Table 11.9.

* Table 11.9 - Lot Sampling

<u>Lot Size</u>	<u>Number of Animals</u>
1-11	All
12-16	12
17-40	15
41-250	25
251-over	30

* (3) Filing Certificates. Inspector
 * shall attach certificates from lots
 * sampled to the MP Form 403-6, be pre-
 * pared to furnish them to FO if DES
 * residue is detected, and hold certifi-
 * cates from unsampled lots for 14 days.

PART 14

INEDIBLE AND CONDEMNED PRODUCT

CONTROL AND DISPOSAL

Subpart 14-A

(Regs: M-314, 325; P-Subpart L, S)

14.1 DIRECT CONTROL, DISPOSAL

All condemned carcasses, parts, viscera, and unborn calves must be visually controlled, or must be under Government lock or seal until denatured, tanked, incinerated or, if eligible for animal food, properly identified with approved material.

Condemned poultry products may also be destroyed by hashing, or by coarse grinding and mixing with waste products (heads, feet, lungs, crops, intestines, gizzard contents, etc.) sufficiently to distinguish them from edible products. They shall be directly controlled by an inspector until hashed or ground and mixed with specified waste material.

14.2 IMMEDIATE HANDLING

Inedible and condemned material must not accumulate from one day to the next except for emergency.

To minimize inspection supervision, the inspector may require denaturing of condemned materials immediately after removal from viscera inspection table, truck, or line.

14.3 SEGREGATION, ISOLATION

Inedible and condemned material shall be segregated and isolated to prevent contamination of edible

product, facilities, equipment, and ingredients used for preparing such product.

14.4 UNDENATURED PRODUCT

Stomachs, crops, intestines, bones, feet, etc.--not condemned nor saved for animal food--and feathers, floor sweepings, etc. need not be denatured (unless local need is identified), provided handling results in denatured appearance.

If the method of collection and handling does not identify the products as inedible, they shall be further identified by an approved identifying agent. Inedible product not rendered within the plant shall be properly identified before the inspector's duty tour is completed.

Poultry plants without rendering facilities may ship condemned material to another location for disposal, provided it is hashed or coarsely ground and mixed with waste products before shipping.

14.5 DEAD ANIMALS, DOA'S

Plant management shall request Circuit Supervisor's permission to receive dead animals other than DOA's on premises. Permission is based upon whether receiving and handling of such animals may create a nuisance, and upon plant's capability to handle such animals and inedible and condemned material produced at the plant.

Plant employees shall place all poultry "dead on arrival" (DOA) in containers marked "U.S. Condemned" and denature with approved denaturant under inspector's supervision.

*

14.6 FACILITY LOCKING OR SEALING

The inspector must lock or seal containers, charging and discharging lids or valves of rendering tanks, and equipment used for conveying or processing condemned product.

A rendering tank with a discharge (lower opening) permanently connected with a blow line shall be filled (charged) under inspector's direct supervision. Cover hatch or its control valve to charging hold (upper opening) shall be locked or sealed after operations.

Locking or sealing of such tanks and equipment is not required, if product is hushed or ground upon removal from condemned truck or container.

14.7 TAGS, SEALS; RECORD

(a) Meat

Numbers of retained or condemned tags--used on condemned animals, carcasses and products--tank seal numbers, sealing and seal breaking time, and inspector's identity may be recorded, at area supervisor's discretion, on the optional MP Form 406-2, Daily Report of Denaturing and Tanking. If completed, this form should be filed with MP Form 403-6. The block space in the heading of the fourth column under "Tag Numbers of Carcasses" may be used for goats, horses, or other species.

(b) Poultry

Occasionally USDA car seals may be used to assure product identity. These seals are usually applied to cars or trucks to prevent loss of product during storage and transportation. When seals are applied for identification of product at plant of origin, the inspector will note their serial numbers and when he is informed of the shipment, send them to inspector at plant of destination.

Accountability of tags is not required. Although these tags are serially numbered, this is done only to

enable the inspector to relate detached stubs to tags used.

14.8 STORAGE

When rendering facilities are not provided, condemned material shall be denatured and held in watertight metal containers in suitable inedible product room pending daily removal, or as approved by RD, to rendering plant(s).

14.9 UNBORN ANIMALS

Handling unborn animals--skinning, blood or specimen collecting, etc.--shall be done in enclosed areas of inedible product departments. Such areas shall be similar to retained cages and shall be secured with Government lock or seal when not under inspector's visual supervision.

Exception! Fetal blood may be collected on the kill floor, provided such operation is under inspector's direct supervision and it does not cause nuisance, product contamination, or excessive inspection coverage.

14.10 BILE COLLECTION

Bile may be collected from condemned livers, provided the procedure does not result in edible product contamination.

Sodium hydroxide must be added to the bile to form a mixture containing 1 percent sodium hydroxide by weight.

Containers must be tightly covered, leakproof, and labeled "(Species) Bile, Sodium Hydroxide Added - For Manufacturing Use Only." They may be stored in edible product areas and shipped in vehicles containing edible product.

14.11 RESEARCH PERMIT

(a) Meat

Permit requests to collect diseased, condemned, or inedible specimens for

research, educational, or other non-food purposes should be referred to the inspector in charge.

When research or educational specimens are collected, material other than specified on MP Form 403-10 shall not be removed.

(b) Poultry

Specimens--condemned poultry carcasses and/or parts--may be released to a private or commercial laboratory for diagnostic and research purposes, without denaturing or identifying, under the following conditions:

1. The purpose for which specimens are desired shall be made known to the inspector in charge.

2. Specimens must be selected in the presence of the inspector in charge or an inspector under his supervision.

3. That the Department may be fully informed, duplicate specimens shall in most cases be sent to the Beltsville laboratory. It is not always practicable to submit duplicate fresh specimens to this laboratory, but portions of appropriate tissues in formalin can usually be sent accompanied by written notes about the case on laboratory forms.

4. Laboratory personnel collecting specimens shall provide the inspector with a signed MP Form 112, Laboratory Specimen Receipt, or an equivalent statement indicating (a) purpose for which specimens taken; (b) head count of carcasses, (c) total weight of carcasses and/or parts, (d) date specimens are taken, (e) location and name of testing laboratory, (f) name and address of processing plant at which specimens are collected.

5. The inspector may transmit the specimens to the responsible laboratory of choice for the processor, grower or live poultry vendor at the industry members' expense if it is not practicable for laboratory personnel to collect the specimens. MP Form 112 shall be prepared with release of condemned poultry for laboratory analysis (see sec. 11.5(g) and Part 20).

The laboratory receiving the specimens is responsible for destroying them when tests are completed to prevent their use for human food and to preclude spread of disease to animals.

The laboratory shall submit a duplicate copy of its findings to the regional office.

14.12 SHIPMENT, STATE LETTER

Establishments wishing to ship inedible and condemned material shall obtain a letter from animal and poultry disease control officials of State(s) involved, certifying that removal of such material is acceptable. Annual renewal of this letter is not required unless specified by State(s). Such letter shall be valid until revoked, and filed at the inspector's office.

14.13 RENDERED FAT (MEAT)

Whenever nonfederally inspected or inedible rendered animal fat having edible character is offered for movement in interstate or foreign commerce without permit (325.11), it must be denatured. Vegetable charcoal of fine particle size may be used at the rate of 1 pound to each 10,000 pounds of rendered fat or, for each 750 pounds of rendered fat, one of the following denaturants:

1. One-third ounce of brucine in two parts of alcohol (ethyl, methyl, isopropyl, or denatured) and four parts of pine oil or oil of rosemary, sufficient to dissolve the brucine;
2. One-half gallon creosote;
3. Two gallons of pine tar;
4. One-fourth gallon of pyridine;
5. One-half gallon of No. 2 fuel oil or approved mineral oil.

Fat for Export. When laws or regulations of a foreign country importing rendered fats require or permit other denaturants, such denaturants may be used provided identification is accomplished. The shipper is responsible for such identification.

14.14 POULTRY PRODUCT, EXPORT

Feet, heads, and oil glands for export are not required to be denatured or treated with identifying material if they are handled sanitarily.

Certain poultry products--gizzards, bones, ova, livers, hearts, and parts--collected for other than human food purpose must be thoroughly identified, unless handled as human food. Identifying may be done with any approved dye (see List of Chemical Compounds). Dye concentration and amount must be adequate to thoroughly identify the product. Such product shall be properly labeled "inedible chicken gizzards for pharmaceutical purpose only."

14.15 DENATURANT; IDENTIFYING MATERIAL

The List of Chemical Compounds shows denaturants or identifying materials that may be used as required by the regulations.

ANIMAL FOOD**Subpart 14-B**

(Regs: M-314, 325; P-Subpart L, S)

14.18 SEPARATE EQUIPMENT

Establishments desiring to save inedible and/or condemned material for animal or fish food must have separate and adequate equipment.

14.19 NUISANCE

Handling animal food product must not create a nuisance or interfere with inspection.

14.20 IDENTIFICATION (MEAT)

All products saved for animal food--lungs, spleens, paunches, udders, etc.--must be promptly handled and properly identified while an inspector is on duty to avoid added inspector supervision.

Although absolute security is not necessary over animal food product during operations, the plant must have an acceptable procedure to assure adequate identification. Such product may be kept overnight at the plant, if under Government lock or seal.

14.21 CONDEMNED PRODUCT**(a) Branding, Control (Meat)**

Condemned carcasses, parts, and livers, eligible for animal or fish food, must be branded "U.S. Condemned" and be under visual control, or under lock or seal until properly slashed and identified.

(b) Condemned Poultry

Condemned poultry products saved for animal food shall be promptly handled,

and kept under inspector's direct control until adequately identified (with approved material).

14.22 STORAGE

Inedible material, packed in properly marked liquid-tight containers and saved for animal food, may be stored in edible product freezers, provided it is separate and does not interfere with edible product handling.

14.23 CERTIFIED ANIMAL FOOD (MEAT)

* (a) Stomachs, Intestines

Stomachs and intestines--after opening or splitting and removing contents--may be saved for certified animal food without treatment with identifying material, and may be stored in approved warehouses provided they are accompanied by MP Form 508.

Washed paunches and denuded tripe for use in certified pet food may be shipped to a pet food manufacturer without denaturing under permit (325.11(f)). To maintain identity, such shipments should be accompanied by MP Form 508 (see Part 20).

* (b) Carcasses Passed for Cooking

* Meat from carcasses passed for cooking may be used in canned, retort-processed animal food product, prepared under the certified animal food program (Part 355). These carcasses must be
* shipped to certified animal food plants
* under official seal according to regulations (325.7). At the receiving
* plant, the inspector will keep an
* inventory and keep such carcasses under
* security until their processing is
* completed.

* (c) Reimbursable (R) Service

MPI service, rendered for supervising identification of certified animal food and for completing MP Form 508, is reimbursable and shall be billed to the plant.

14.24 HORSEMEAT PLANTS

Horse and other equine meat plants may receive federally inspected beef, veal, mutton, goat meat, pork, poultry, and their byproducts for use in manufacturing animal food. When not used for animal food, such meat and byproducts shall not be reshipped unless in their original unopened containers. Carcasses and parts from cattle, calves, sheep, goats, and swine cannot be shipped from horsemeat plants.

PART 16
MARKING
PRODUCTS AND CONTAINERS

MARKING DEVICES

Subpart 16-A

(Regs: M-312, 316)

16.1 APPROVAL

(a) Marking Device

Imprints of any marking device or other devices, submitted through the * inspector in charge to MPITS-SLD for approval, shall be legible and as required by regulations.

(b) Official Mark, Advertisement

Approval of official marks appearing in newspaper advertisements, billboards, etc., is unnecessary; however, such marks may be reviewed locally before publication; they should conform to standards and not be misleading.

(c) Stencil, Stamp, Pencil

Inspector in charge may approve stencils, rubber stamps, pencil marks or prints applied to shipping containers. They may be used in addition to required markings and must not be false or misleading. Official inspection mark must be approved by MPITS-SLD.

(d) Grade Marking

The inspector in charge may approve Federal (Sec. 16.8(a)(1)) or State grade markings applied to carcasses and cuts at federally inspected plants by, or under, the supervision of Federal or State grading employees. Other grade * markings shall be approved by MPITS-SLD.

16.2 BRANDS (Meat)

(a) Size, Design

Official brands must be uniform in size and design, and must conform to specifications.

(b) Approval, Use

Approval and use of official brands shall be according to regulations.

(1) Sanitation. Brands bearing inspection or other marks shall be kept clean while in use.

(2) Misuse. Inspection marks shall not be used on clothing, walls, posts, and the like.

(3) Buyer's brands. These brands and marks shall be so applied as not to obliterate or be confused with required markings.

(4) Hot iron brand. Legibility may be improved by drilling two small holes (1/16 inch diameter) through the hot iron brand's face to allow steam escape.

A cast steel burning brand improves the imprint on cured products.

(5) Hot ink brand. Ink brands equipped with a thermostatic control, improve branding of meat, meat byproducts, and meat food products.

(6) "U.S. Insp'd and Condemnod," U.S. Passed for Cooking." These brands shall be used for marking carcasses and parts. They should not be substituted by other marks or tags.

★ (c) Supply, Replacement.

★ MP Form 216, Authorization Certificate, must be used when establishments order brands. This form authorizes the making of brands bearing official inspection marks. FSIS officials will issue the certificate when requested by the establishments. Section 1, blocks 1 through 12 are to be completed by establishment. The FSIS official (normally, the inspector in charge (IIC)) will complete section 11, blocks 1 through 9. The brand manufacturer completes section 1, blocks 13 through 20, and returns copy 1 of the certificate with the brands to the named FSIS official. If inspection services are pending at the establishments (grant of inspection not issued), the MPIO Area Supervisor will be shown as the FSIS official receiving the brands.

(d) Control

FSIS employees must always control all official brands - in use or in storage. Plant owners and operators must make arrangements with the inspector in charge to carry out this order.

★ (1) Record. A current inventory of all official brands by size, type, and serial number will be maintained by the IIC, with a copy of such record maintained in the MPIO Area Office.

★ (2) Disposal. Brands lost or destroyed after becoming unserviceable due to wear or damage will be shown on the records as to disposition, and the replacement brands will be recorded on the current inventory. The IIC will supervise destruction of brands.

16.3 SEALS; CONTROL

Official seals received at regional offices shall be controlled under

security. This includes logging in new shipments, inventoried storage, and logging out shipments to specific field locations. Each shipment to the field shall be accompanied with two copies of a regional receipt for the seals.

Shipments of official seals received at field locations shall be checked for accuracy. Inspectors will date and sign accepted shipment receipts, also noting "shipment received intact" and return one signed copy to the regional office. Questionable shipments shall immediately be reported to the circuit supervisor.

Official seals used for any reason shall be recorded by serial numbers. Recordings shall also indicate "date affixed" and "where affixed," and whenever applicable, "date broken." Each recording will be signed by the inspector who affixes or breaks a seal.

Official seal inventories shall be adjusted at least daily to reflect any change in count of seals on hand.

MARKING (MEAT) SUBPART 16-B

16.6 CARCASS BRANDING
(REFERENCE FSIS DIRECTIVE 6810.2, 3/13/86.)

16.7 PRODUCT BRANDING
(REFERENCE FSIS DIRECTIVE 6810.2, 3/13/86.)

16.8 GRADING
(REFERENCE FSIS DIRECTIVE 6810.1, 8/7/85.)

16.11 MARKING
(REFERENCE FSIS DIRECTIVE 6810.2, 3/13/86.)

NOTE! DUE TO CONDENSED MATERIAL, PAGES 109 and 110 WERE NO LONGER NEEDED:
85-5 THEREFORE, PAGE 111 FOLLOWS THIS PAGE. ,

PART 17

LABELING

LABEL APPROVAL; CONTROL

Subpart 17-A

(Regs: M-317, P-Subpart N,P,T)

Establishments are encouraged to use *
the newest form, FSIS 8822-1, *
"Application for Approval of Labels, *
Marking or Device." *

Submissions to SLD should be sent :
to: :

Chief, Operations Branch :
Standards and Labeling Division :
Meat and Poultry Inspection :
Technical Services :
P.O. Box 7416 :
Benjamin Franklin Station :
Washington, DC 20044-7416 :

* 17.1 APPROVAL

* (a) Responsibility

* The Standards and Labeling Division
* (SLD), Washington, D.C., has primary
* responsibility for the approval of
* marking and labeling materials. All
* labeling may be submitted to SLD for
* approval. All complex labels and
* labels for which temporary approvals
* are requested must be submitted to
* SLD. See § 317.4 of the Meat
* Inspection Regulations and § 381.132
* of the Poultry Products Inspection
* Regulations.

* The inspector-in-charge (IIC) has
* the authority to approve certain
* labeling and labeling modifications as
* defined in the regulations (§ 317.4(e)
* and 381.132(c)).

* Limited categories of generically
* approved labeling; labels previously
* approved in final form by SLD or the
* IIC that are resubmitted with minor
* modifications as defined in the
* regulations (§ 317.5 and § 381.134),
* need no formal approval.

* Plant management is responsible for
* the accuracy of all labels used with
* products. The inspector should review
* all labels prior to use. The IIC may
* contact SLD through his or her
* immediate supervisor for advice on
* labels offered for his approval.

* (b) Application

* Label approval applications must be
* submitted on a transmittal form to be
* completed by the establishment.

(c) Product Samples

Product samples when requested by :
SLD, should be submitted with pro- :
posed labels and mailed to: :

Standards and Labeling Division :
MPITS, FSIS, USDA :
300 12th Street, SW. :
Room 204-Annex :
Washington, DC 20250 :

Perishable samples should be packed
with sufficient refrigerant to last
until received. Since USDA mail rooms
and local delivery services do not
have refrigerated or frozen storage
space to hold product over the week-
end, perishable samples must be sent
early in the week to assure delivery :
before 4:45 p.m. Friday.

(d) Sample Delivery

For all delivery services, except
postal, place a note near the address
on each package requesting the carrier
to call 202/447-4317 for delivery
instructions.

(e) Conditional Approval

When SLD places remarks, modifica- :
tions, or conditions for use on label :
approvals, they shall be complied with :
for use of the label.

* (f) Approval Procedure

* The IIC's action varies with the
 * type of label approved, provided the
 * label is in full compliance with the
 * regulations.

* If the label is to be approved by
 * SLD or the IIC, the establishment will
 * submit it in triplicate, with each
 * affixed to a transmittal sheet.

* If the sketch or label is to be
 * given final approval by SLD, the IIC
 * returns all three copies to the
 * establishment for submission to
 * Washington.

* The IIC-approved label application
 * is signed and dated by the IIC and
 * distributed as follows: one copy to
 * the establishment, one copy to SLD for
 * file and audit, and one copy for the
 * IIC's file. (The IIC should forward
 * the copy for SLD in an envelope marked
 * "AUDIT.")

* If the label is to be generically
 * approved, the establishment will
 * supply the IIC, prior to its use, a
 * single copy of the label and the
 * approval number of the previously
 * approved label. The generically
 * approved label is cross referenced
 * with the previous approval number,
 * initialed, dated, and filed in the
 * IIC's office.

17.2 CONTAINER APPROVAL

(a) Experimental Product

Only SLD may approve labels for "not
 for sale" product used experimentally
 or as samples.

(b) Markings.

Labeling may consist of a combina-
 tion of printing, stenciling, box dyes,
 etc., for large true containers and for
 shipping containers.

Crayons are unacceptable for applying
 required labeling features except for
 figure indicating content quantity.

Empty containers, bearing approved
 labels including official marks of
 inspection, may be used for display or
 advertising purposes without further
 approval.

* * *

NOTE! DUE TO CONDENSED MATERIAL, PAGE 113 WAS NO
 LONGER NECESSARY: THEREFORE, PAGE 114 FOLLOWS
 THIS PAGE.

(c) Kosher Product Containers *

Containers used for hearts, livers,
 and other product or tissues with
 attached metal tags indicating kosher
 inspection, must be labeled "kosher
 tags attached."

* * *

* * *

17.5 CONTROL

(REFERENCE FSIS DIRECTIVE 7231.3,
 3/19/86.)

17.8 NAME OF PRODUCT

(REFERENCE STANDARDS AND LABELING POLICY
 BOOK.)

statement, only applicable required markings should be included. However, if nonrequired features are added, all applicable required labeling features should be shown. For example, if product name is added on a tag bearing the list of ingredients in bologna, that side of the tag bearing the two features should be completed by adding firm's name and address.

(d) Vignette

Product shall comply with quality characteristics of the vignette (see Subpart 18-L).

(e) Ingredient Listing; General Terms

Use of the following general terms should not be construed to invalidate approval of labels bearing more specific ingredient declaration, nor to prevent use of such designation when desired by the establishment.

(1) Pork, beef, veal, mutton, goat

meat. These terms are acceptable regardless of the anatomical derivation of the meat, except that tongues and hearts should be specifically named; for example, "pork tongues" and "beef hearts."

A declaration such as "beef cheeks" or "pork cheeks" should be used for untrimmed cheeks; that is, cheeks with glandular material attached.

STS may require specific declaration for meat ingredients on labels for certain products such as chili con carne, chili con carne with beans, corned beef hash, ham spread, and fabricated fresh meat items (hamburger, chopped or ground beef, and steaks).

(2) Meat byproducts. Byproducts such as tripe, livers, fat, etc., must be individually declared.

(3) Pork fat. Pork fat should be declared as such in the ingredients statement. To distinguish between pork and pork fat, skinned pork jowls may be declared as "pork," but clear fatbacks and clear shoulder plates must be declared as "pork fat."

17.9 INGREDIENTS

(a) Order of Predominance

Ingredient statement shall show ingredients listed in the descending order of their percentages according to amounts used in product preparation, rather than in order of predominance in finished product. For example, cooked sausage may contain 10 percent added water; however, it is customary to use more water in its preparation. In such case, water must be declared in the ingredients statement in order of its predominance by comparison with other ingredients.

(b) Minimum or Maximum Quantities

When certain fixed minimum or maximum quantities or particular ingredients are prescribed in the composition of designated product, strict adherence to the requirements must be obtained. Laboratory analysis may be obtained when necessary. Plant's figures alone should not be relied on.

(c) Tags, Tissue Strips, Brands

When tags, tissue strips, brands, etc., are used to apply ingredients

4) Smoked Meats. Smoked ham or
a in fabricated product
clared in the ingredient
c "smoked pork," "ham,"
r

(5) Cereal. This term is acceptable without more specific declaration to denote one or more meals or flours from cereal grains. Bean, soya, or potato flours must be declared by name because they are not classed as cereal.

(6) Dehydrated onions, garlic, celery. When these items are used as seasoning agents, they may be shown as onions, garlic, or celery.

(7) Dehydrated onions, potatoes. Dehydrated onions (chips) and dehydrated potatoes, used as a component rather than as a seasoning agent, should be listed as dehydrated onions and dehydrated potatoes.

(8) Onions, garlic, parsley. When onions, garlic, and parsley are used as such, they should be listed as onions, garlic and parsley in the ingredients statement. Powdered onions, garlic, or parsley may be declared as flavoring.

(9) Spice extracts: In the list of ingredients statement, spice extracts may not be listed as spices, but as flavorings.

(10) Cheese. The term "cheese," unqualified, may be featured in the product name, provided its standard of identity (pasteurized process cheese) is reflected in the ingredients statement. The unqualified word "cheese" in the ingredients statement refers only to "cheddar" cheese.

(11) Cracker meal, macaroni, etc. Ingredients such as cracker meal, macaroni, and similar substances having an FDA standard of identity which in themselves are fabricated from various ingredients may be declared as such instead of listing each individual component part.

17.10 NET WEIGHT

(a) Vienna sausage

Vienna sausage or similar product, packed in water or brine in 208 x 208 cans, must weigh 4 ounces net.

(b) Gross Tare Weight (Meat)

A statement of gross and tare weights in lieu of net weight on containers such as tierces, barrels, drums, boxes, crates, and large-size fiberboard containers is acceptable.

(c) Products in Casings

Meat and meat food products in casings need not be marked with a statement of quantity. However, a space or an opaque area preceded by the words "net weight" may be provided on the casing for applying the weight. When casings are marked with a statement of quantity, the inspector must check the accuracy.

(d) Catch Weight of Certain Sausages

Frankfurters, wieners, pork sausage, and breakfast sausage may be packed at catch weights; however, when they are not packed at uniform weights of 8 or 12 ounces, or 1 pound, the statement of quantity of contents should be shown with the same degree of prominence as other required labeling features, including product name.

(e) Pot Pies

Meat pot pies, when in square containers and the quantity varies from the usual 8 ounces, shall have net weight statement shown with same prominence as the most conspicuous feature on the label printed in color of ink contrasting sharply with the background.

(f) Procedural Control

See Subpart 18-K.

(g) Metric Weight

In addition to the avoirdupois

weight, an accurate metric weight may be shown on approved labels for immediate and/or shipping containers without label reapproval. Appropriate wording would be "Net Weight 4 Ounces-113 Grams." Approved abbreviations may also be used.

17.11 PRODUCT DATING (POULTRY)

Packing date should be shown on immediate or shipping containers of poultry food products as required by regulations (381.126, 381.129).

When product is packed and held in freezer storage for later repacking, the explanatory phrase on repacked product should be in terms of "sell by" or "use before." However, if a "packed-on" phrase is desired, the date shown shall be that of the original packing of the product.

the following conditions:

a. Application for label approval must be supported by a detailed qualitative and quantitative formula and a detailed method of processing.

b. Raw and cooked weights must be provided where applicable.

c. A quality control program approved by the Processed Products Inspection Staff, Technical Services.

d. Labels must bear information on portion size and count.

Applications for label approval and company advertising material accompanying product under an approved label shall not make reference to the school lunch program or type A pattern requirements except under conditions provided for in the first paragraph of this section.

LABELING TERMINOLOGY SUBPART 17-C

SUBPART 17-C-REFERENCE STANDARDS AND LABELING POLICY BOOK, EXCEPT:

17.13(j)(1)-REFERENCE MP1 REGULATIONS 319.702.)

NOTE! TO CONDENSED MATERIAL, PAGES 117, 118, 119, 120 WERE NO LONGER NEEDED; THEREFORE, PAGE 121 IS PAGE.

* 17.12 SCHOOL LUNCH; LABELING

* Labels bearing any word, picture, or statement purporting the product to be acceptable under the School Lunch Program of the Food and Nutrition Service (FNS) shall be evaluated for acceptability as follows:

* 1. Labels may bear the statement "The textured vegetable protein used in this product is fortified in accordance with FNS Notice 219" under the following conditions:

* a. The textured vegetable protein is on the list of approved products published by FNS. The names of the manufacturer and the textured vegetable protein shall be shown on the application for label approval.

* b. The meat used shall comply with the fat limits established by FNS--beef 30 percent and pork 26 percent.

* c. The water content shall be no greater than 1½ times that of the textured vegetable protein used.

* 2. Labels may bear a finished product claim such as "This cooked ___ oz. patty provides ___ oz. equivalent of meat and meat alternate for Type A pattern requirements (Nov 78)" under

PACKAGING MATERIAL

Subpart 17-D

(Regs: M-317, P-Subpart N,P,T)

Packaging materials [See 9 CFR *
301.2(xxx) and 381.1(b)(59)] include *
paper products (cartons, bags, *
band labels, wrappers, inserts, label *
stock, etc.); twine; plastics (films, *
bags, semirigid materials); glass and *
metal containers and closures (cans, *
jars, lids); aluminum foil; or other *
material used to form a container, *
wrapper, label or cover in direct *
contact with meat or poultry products. *

17.16 ACCEPTANCE; RESPONSIBILITY *

All packaging materials must be safe *
for the intended use and may not cause *
adulteration of edible products. *

(a) Identification *

All packaging materials shall be *
identified by a brand name or supplier. *

* identification on shipping cases,
 * invoices, or bills of lading which can
 * be traced back to a particular
 * material.

* (b) Plant's Responsibility

* Official establishments are required
 * to receive written guaranties from the
 * suppliers of their food contact pack-
 * aging materials. Official establish-
 * ments shall retain in their files
 * written guaranties that the materials
 * are in compliance with the Federal
 * Food, Drug and Cosmetic Act (FFDCA) as
 * amended and all applicable food addi-
 * tive regulations. A guaranty is not
 * required for packaging materials not in
 * direct contact with meat or poultry
 * products. Examples of these are
 * shipping cartons which are not the
 * immediate container, netting placed
 * over sealed plastic wrap, labels
 * applied to cans or other containers
 * after the food is sealed inside, and
 * strapping or tape used where food
 * contact is not expected.

* The guaranty [See 9 CFR 317.20 and
 * 381.144] need not be in any specific
 * format, but must include the following:

- * 1. a statement that the material
 * complies with the Federal Food, Drug
 * and Cosmetic Act and any applicable
 * regulations,
- * 2. the brand name or code designation
 * of the material,
- * 3. the name of the supplier,
- * 4. the conditions of use of the
 * material, including temperature and
 * other pertinent limits, and
- * 5. the signature of an official of
 * the supplier (should include typed or
 * printed name and title).

* The identity of all food contact
 * packaging materials must be traceable
 * to the applicable guaranty. USDA-
 * issued acceptance letters for packaging
 * materials may not be substituted for a
 * guaranty.

* (c) Inspector's Responsibility

* The inspector will permit use of
 * a material on the basis of the supplier's

* guaranty unless there is a specific
 * reason to doubt the acceptability of
 * the material.

* The inspector should be alert to the
 * use and performance of all food contact
 * packages and packaging materials.
 * Since certain materials may fail to
 * perform as expected (e.g., transfer
 * color or odors or otherwise affect the
 * characteristic of meat and poultry
 * products), acceptance by the inspector
 * must be based on performance under
 * actual packaging conditions.

* The inspector may inspect and dis-
 * allow the use of packaging material,
 * and may retain any product in it if
 * there is reason to doubt the accepta-
 * bility of the packaging materials.

* When the inspector questions the
 * acceptability of a material, assistance
 * may be requested from SCI, Food Ingredi-
 * ent Assessment Division (FIAD) at
 * (301) 344-2566. The inspector should
 * provide the supplier's name, brand name
 * or other designation for the material,
 * and the condition of use of the
 * material.

* The inspector may request assistance
 * for problems relating to mechanical
 * failure of materials (e.g., defective
 * seals in cans, pouches, semirigid
 * containers and other similar materials)
 * from MPITS, Processed Products Inspec-
 * tion Division (PPID) at (202) 447-3723.

* (d) Packaging Monitoring Program

* SCI-FIAD conducts a monitoring
 * program involving a series of limited
 * surveys of official establishments
 * selected on a random basis. Inspectors
 * at the selected establishments are
 * requested to provide information on a
 * specified number of packaging materials
 * according to instructions provided by
 * SCI-FIAD. Using the information
 * received from inspectors, FIAD reviews
 * the material and requests additional
 * information from plant management
 * and/or suppliers to confirm compliance
 * with applicable regulatory criteria.

17.17 STARCHES

(REFERENCE STANDARDS AND LABELING
POLICY BOOK.)

17.18 TALC; STARCH; ALUMINUM FOIL

A small quantity of food grade talc or starch dusted on plastic films to prevent sticking is considered harmless.

Lead-free aluminum foil and its products are not toxic. However, products with considerable quantities of salt or acidic ingredients, such as tomatoes, vinegar, barbecue sauce, etc., may corrode the aluminum packaging material and cause package failure and product contamination. To prevent corrosion, such material should be coated with an approved resinous or polymeric substance and should withstand temperatures up to 450F. (see section 17.16).

"7.19 PROTECTIVE COVERING (Poultry) 17.20 DECEPTIVE PACKAGING *

REFERENCE STANDARDS AND LABELING
POLICY BOOK.)

Containers made, formed, or filled *
which will be misleading to the con- *
sumer or create unfair competition *
in the market place are termed *
misbranded by both the Meat Inspection *
Act and the Poultry Products Inspec- *
tion Act. An example is a carton, *
pouch, or bag which has an excessive *
amount of free space in the package. *

Inspectors should be especially *
watchful of such practices and *
caution plant management concerning *
any product that is deceptively pack- *
aged. Where there is disagreement *
between FSIS inspectors and plant *
management as to whether or not a *
package is deceptive, samples and *
an explanation of the circumstances *
may be submitted to the Processed *
Products Inspection Division (PPID), *
Processing Procedures Branch, FSIS, *
MPITS, U.S. Department of Agriculture, *
Washington, DC 20250, for review *
and evaluation. *

FILING OF LABELS

Subpart 17-E

(Regs: M-317; P-Subpart N,P,T)

(REFERENCE FSIS DIRECTIVE 7227.1, 11/13/85.)

NOTE! DUE TO CONDENSED MATERIAL, PAGE 123 WAS NO LONGER
NEEDED: THEREFORE, PAGE 124 FOLLOWS THIS PAGE.

PART 18
REINSPECTION AND PREPARATION
OF
PRODUCT

GENERAL REQUIREMENTS

Subpart 18-A

(Regs: M-318; P-Subpart O)

18.1 RESPONSIBILITY

(a) Plant

Management is responsible for preparing product complying with regulations, approved formulation and procedures.

(b) Inspector

He should inspect product for cleanliness and wholesomeness throughout all fabrication phases. To effectively control products, he should (1) be familiar with product formulation; (2) verify ingredients origin, condition, predominance order, and identification; and (3) require proper plant control for all operations.

The inspector must be alert to detect and eliminate unsound condition, improper weight, and adulteration of packaged products and byproducts.

18.2 REINSPECTION

To assure wholesomeness and proper identification, product must be reinspected as necessary.

Specific reinspection requirements are discussed in the following subparts.

In processing poultry plants, incoming poultry lots shall be routinely inspected for condition only,

including possible transit contamination. Such lots will not be reinspected for compliance with ready-to-cook requirements since this is done at slaughter plants. However, when serious or gross discrepancies for RTC requirements are noted during routine reinspection, the inspector must make necessary inspections and take appropriate action so that such poultry lots meet the ready-to-cook definitions before being released. In this case, Form MP 215 shall be completed (see Part 20).

Upon reinspection of poultry products if part of a lot is unwholesome, the inspector retains the lot and notifies the inspector in charge.

Retained product shall not be removed from the plant unless denatured or identified with an approved identifying agent, or after RD's approval.

18.3 NONMEAT-NONPOULTRY FOOD

The Administrator may approve preparation of certain nonmeat or nonpoultry foods in official plants when it is determined that there is no nuisance or cross contamination.

When equipment is used interchangeably, it must be thoroughly washed and sanitized after being used for nonmeat or nonpoultry food product.

18.4 PRODUCT TEMPERATURE

(a) Cold Spots

In taking product temperature, carefully consider "cold spots" in heating chambers or areas with poor air circulation.

(b) Thermocouples

They may be used to record temperatures. However, their accuracy shall be checked against an official (standard) thermometer. Placing thermocouples in product shall be under inspector's supervision.

18.5 LOT INSPECTION; SAMPLING

Sampling finished product is necessary to assure compliance with regulations, approved fabrication procedures, and labeling. Thus, the inspector shall sample production lots, as required, and submit samples to the laboratory for analytical verification of product composition (fat content, added water, restrictive additives, etc.).

Inspector's supervisor should assure that product sampling is adequate and should periodically take check samples for laboratory analysis.

18.6 PLANT OPERATED PARTIAL QUALITY CONTROL PROGRAMS

This part applies only to Partial Quality Control (PQC) programs for processing. PQC programs for activities allied with slaughter; e.g., offal, head meat, etc., are to be handled by the Slaughter Inspection and Standards Procedures Division, MPITS.

The Regional Offices and Meat and Poultry Inspection Technical Services (MPITS) have been designated as approving offices for final approval of partial quality control programs. Inspectors in charge have the primary responsibility for assuring adherence to approved partial quality control programs. The Administrator or his designee will terminate approvals if necessary. (See MPI Regulations, sections 318.4(d) and 381.145(d).)

(a) To apply for partial quality control programs.

Any owner or operator of an official establishment preparing meat food or poultry products may submit a quality control program for a product, operation, or a part of an operation for approval.

To obtain approval the establishment's request must include:

1. A letter from the establishment official responsible for quality control stating the objective of the program. The letter must also assure that all data and information generated will be maintained and made available by the establishment to enable USDA monitoring for compliance.

2. The request must contain detailed information concerning: (a) raw material control, (b) the critical check or control points, (c) the nature and frequency of tests to be made, (d) the charts and records that will be used, (e) the length of time such charts and records will be maintained, (f) the limits which will be used, (g) the points at which corrective action will occur, and (h) the nature of the corrective action, ranging from the least to the most severe.

(b) Steps for approval and monitoring of partial quality control programs. The inspector shall:

1. Along with the inspector's supervisor review, evaluate and recommend approval or disapproval of partial quality control programs.

2. Verify implementation of partial quality control programs as approved by the Regional Office or MPITS.

3. Verify the establishment's conformance to the partial quality control program.

4. Assure documented steps are taken if the establishment fails to comply with the approved partial quality control program. See item (c) below.

5. Retain product on hand and determine intent to recall shipped product if adulterated or misbranded product is prepared or shipped. See item (d) below.

(c) Steps when an establishment fails to comply with an approved quality control program.

1. STEP 1. If deficiencies are noted in routine observations of the partial quality control program and the plant has not corrected the

iciency, the inspector shall inform designated plant personnel of the findings. Plant personnel must correct the deficiencies to conform to the partial quality control program.

STEP 2. The inspector issues a written notice to plant management when the partial quality control program has not been effective or the deficiency is likely to result in adulterated or misbranded product. The written notice shall detail the problem including the nature of the deficiency, location, date, time, personnel contacted, pounds/units affected, and any other pertinent information (which includes any history of similar problems). The written notice shall also request a plant response, which must include when and how the deficiency will be corrected, how the deficiency will be prevented from recurring.

Distribution of the written notice shall be as follows: the original notice shall be sent to plant management, one copy shall be filed in a Corrective Action/Termination folder, and one copy shall be sent to the Circuit Supervisor.

STEP 3. The Circuit Supervisor shall send a letter to plant management when Step 2 has not been effective or written notices have been issued for repetitive deficiencies if a pattern has developed. The letter shall contain a comprehensive description and history of the problem and a request for immediate corrective action. The Circuit Supervisor shall maintain all written notices and any supporting documentation on site to assist in writing the letter.

The Circuit Supervisor shall distribute copies of the letter as follows: original letter to plant management, one copy to the inspector, one copy to the Corrective Action/Termination folder, one copy to the Area Supervisor, one copy to the Regional Director, and one copy for Circuit Supervisor.

STEP 4. If the plant fails to respond to the partial quality control program and corrective action as described in Step 3 has not been effective, the Circuit Supervisor shall inform plant management by

letter recommending termination of the program to the Regional Director. The letter shall contain a comprehensive description and history of the problem and past attempts at corrective action.

The Circuit Supervisor shall distribute copies of the letter as follows: original letter to plant management, one copy to the inspector for the Corrective Action/Termination folder and one copy to the Regional Director through the Area Supervisor.

The Area Supervisor should provide any comments to the Regional Director to aid in determining whether the termination process should proceed. If the Regional Director does not recommend termination, the written reasons for not proceeding with the termination process shall be returned through channels.

5. STEP 5. If termination is warranted, the owner/operator shall be sent a letter signed by the Administrator or his designee. The letter will inform the plant that termination of their partial quality control program will occur unless the noted deficiencies are corrected to the satisfaction of FSIS. Plant management may present views to the Administrator within 30 days of the date of the letter. If views are not presented and/or the deficiencies are not corrected to the satisfaction of FSIS during the 30-day period, the program shall be terminated upon plant receipt of a letter from the Administrator or his designee. If there is a conflict of facts, a hearing shall be provided on written request from plant management. Termination would still occur and remain in effect pending final determination through the hearing process.

(d) Steps to follow when adulterated or misbranded product is prepared or shipped.

1. The inspector shall:

- (1) retain the product in the plant and determine the plant's intent to voluntarily recall shipped product,
- (2) discuss the cause of the problem with plant management, and
- (3) immediately inform the Circuit Supervisor of the incident.

Part 18

* 2. The Circuit Supervisor should forward all documentation on the incident through the Area Supervisor to the Regional Director. If termination is recommended, the Regional Director shall forward all documentation to the Administrator. If the Regional Director does not recommend termination, all documentation should be returned through channels with the reasons for not proceeding with the termination process.

* 3. If termination is warranted, the owner/operator shall be sent a letter signed by the Administrator or his designee. The letter shall inform the plant that their partial quality control program is terminated upon receipt of the letter. Plant management may present views to the Administrator within 30 days of the termination date. The Regional Director will determine if additional inspectional coverage is needed during the termination process.

* If there is a conflict of facts, a hearing will be provided on written request from plant management. Termination remains in effect pending a final determination through the hearing process.

* (e) Laboratory verification sampling.

* The Inspector shall:

* 1. Draw all laboratory verification samples at the normal rate for that product or as otherwise instructed, orally or in writing, by supervisory program personnel.

* 2. Calculate compliance by lumping laboratory results for all products together and plotting the verification sample laboratory results in the order in which they were submitted for testing. The inspector may use a chart similar to page 125d

* 3. Follow all other applicable instructions when a product fails to comply or falls into various action zones.

* 4. When fifteen (15) consecutive sample results meet the boundary defined in the chart by "in compliance":

* a. Reduce the sample submission rate by one-half. This will require skipping of normal sampling times. Use a random procedure to skip times.

* b. While on the one-half rate, if at any time a sample is out of compliance, do the following:

* (1) Take only the action which is required by other applicable instructions; and

* (2) Sample the next four (4) consecutive times at twice the normal rate.

* c. Apply these criteria to the four (4) consecutive sampling times:

* (1) If one of the four times is out of compliance, begin immediately sampling at twice the normal rate for 15 times.

* (2) If all four (4) are in compliance, resume the one-half sampling rate.

* 5. When fifteen (15) consecutive sample results drawn at one-half the normal rate (for a total of at least 30 samples) meet the boundary defined in the chart by "in compliance":

* a. Reduce the sample submission rate to one-fourth of the normal rate.

* b. While on the one-in-four rate, if at any time a sample is out of compliance, do the following:

* (1) Sample the next four (4) consecutive times at twice the normal rate.

* (2) If one of the four times is out of compliance, begin immediately sampling at twice the normal rate for 15 times.

* (3) If all four (4) are in compliance, resume the one-in-four sampling rate.

* 6. When fifteen (15) consecutive sample results drawn at one-fourth the normal rate (for a total of at least 45 samples) meet the boundary defined in the chart by "in compliance":

* a. Reduce the sample submission rate to one-eighth of the normal rate.

- * b. While on the one-in-eight rate,
- * if at any time a sample is out of
- * compliance, do the following:
- * (1) Sample the next four (4)
- * consecutive times at twice the normal
- * rate.
- * (2) If one of the four times is out
- * of compliance, begin immediately
- * sampling at twice the normal rate for
- * 15 times.
- (3) If all four (4) are in
- compliance, resume the one-in-eight
- sampling rate.
- 7. Continue on the one-in-eight
- sampling rate until a sample fails to
- meet the boundary defined in the chart
- by "in compliance".
- 8. When sampling is conducted at
- twice the normal rate, the condition
- for returning to normal frequency is
- fifteen (15) consecutive, in-compliance
- sample results.

(LUMP ALL SAMPLES REGARDLESS OF PROGRAM ON ONE CHART)

out of compliance	Sample at twice the normal rate
in compliance	First 15=normal rate; second 15=one-half; third 15=one-fourth; fourth 15=one-eighth
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	Number of samples

BONELESS MEAT REINSPECTION (MEAT) select a larger sample for greater assurance.

Subpart 18-B

(Regs: M-318; P-Subpart O)

18.9 PRODUCT

- * Boneless meat--chucks for manufacturing, mixture of wholesale cuts, and trimmings--from cattle, calf, sheep, goat, and swine carcasses shall be reinspected before shipping as outlined in this subpart.

Exception! Inside and outside rounds, knuckles, loin strips, plates, navels, shoulder clods, briskets, flanks, tenderloins, chucks, hams, picnics, pork loins, and other whole-sale cuts are excluded if packed and so labeled.

18.10 PLANT RESPONSIBILITY

Plant management shall provide adequate help, facilities, and equipment for reinspection.

To insure clean product prior to boning, the plant should designate an inspection area located prior to cutting and boning operation that is equipped with adequate light and facilities. A plant employee should inspect and remove foreign material and defects from carcasses and parts prior to boning.

18.11 PROCEDURE

Sampling plans and criteria for disposition of lots of boneless meat shall be as prescribed in Table 18.1.

Reinspection procedures may be divided into "lot inspection" and "online inspection."

(a) Lot Inspection

Plant management is responsible for grouping product into coded lots acceptable to the inspector in charge, and for adequately identifying and reconditioning rejected lots.

The inspector shall:

1. After lot is completely assembled, determine its size (in pounds), and select indicated sampling plan from Table 18.1. The inspector may select a larger sample for greater assurance.

2. Randomly select required number

2. Randomly select required number of cartons from the lot in proportion to different code marks, and remove 12-pound sample units from the cartons.

3. Examine product thoroughly, classify defects--use defect criteria table--and determine acceptance or rejection according to sampling plan.

4. After reconditioning, reinspect rejected lot at a sampling rate one plan higher than the original.

5. If applicable, record number of defects by container code on MP Form 450 and file for 1 year.

Common source product. When product from one boning source is taken to two separate areas (further processing, shipping), such product is considered "common source."

Also, if several boning tables combine product to a single belt and product is diverted to different areas, the product is all "common source."

The inspector shall:

1. Examine the product as outlined under "Lot Inspection" on each line.

2. After inspecting 60,000 pounds or 2 days' production (whichever is less) without rejection, examine as above only product diverted for shipment and apply normal surveillance over common source product to be used for further processing. Sampling plan will be based on total production (including product diverted to further processing).

3. If a lot is rejected, return to lot inspection of all lines until 60,000 pounds or 2 days' production is inspected without rejection.

(b) Online Inspection

(1) Plant. To qualify, plant must (a) have good history of producing clean product, (b) be approved by Reg. Director, and (c) assign competent personnel to:

1. Sample product, examine sample unit, and properly classify defects. Sampling point shall be close to where product enters the containers.

2. Draw a 30-pound sample unit from each production line, or common source, at least every half hour (average).

Table 18.1 - Sampling Plans

Lot size (pounds)	Plan No.	Step No.	Sample units	Major		Critical		Total	
				Ac	Re	Ac	Re	Ac	Re
1,000 or less	5 ^{1/}	-	3	0	1	0	1	1	2
8,000 or less	10	-	6	0	1	0	1	5	6
8,000 to (but not including) 24,000	15	1 2	9 <u>3</u>	0 <u>-</u>	2 <u>-</u>	0 <u>-</u>	1 <u>-</u>	4 <u>-</u>	8 <u>-</u>
Total			12	1	2	0	1	8	9
24,000 to (but not including) 60,000	20	1 2	15 <u>15</u>	0 <u>-</u>	3 <u>-</u>	0 <u>-</u>	1 <u>-</u>	6 <u>-</u>	12 <u>-</u>
Total			30	2	3	0	1	18	19
60,000 to (but not including) 240,000	25	1 2	22 <u>25</u>	0 <u>-</u>	4 <u>-</u>	0 <u>-</u>	1 <u>-</u>	9 <u>-</u>	16 <u>-</u>
Total			47	3	4	0	1	26	27
240,000 to (but not including) 500,000	30	1 2	27 <u>40</u>	0 <u>-</u>	4 <u>-</u>	0 <u>-</u>	1 <u>-</u>	10 <u>-</u>	19 <u>-</u>
Total			67	4	5	0	1	35	36
500,000 to (but not including) 1,000,000	35	1 2	33 <u>56</u>	0 <u>-</u>	5 <u>-</u>	0 <u>-</u>	2 <u>-</u>	12 <u>-</u>	21 <u>-</u>
Total			89	5	6	1	2	45	46
500,000 to (but not including) 1,000,000	40 ^{2/}	1 2	40 <u>71</u>	0 <u>-</u>	6 <u>-</u>	0 <u>-</u>	2 <u>-</u>	15 <u>-</u>	25 <u>-</u>
Total			111	6	7	1	2	56	57
1,000,000 and over	45	1 2	72 <u>48</u>	3 <u>-</u>	7 <u>-</u>	0 <u>-</u>	2 <u>-</u>	32 <u>-</u>	41 <u>-</u>
Total			120	6	7	1	2	60	61
1,000,000 and over	50 ^{2/}	1 2	120 <u>100</u>	4 <u>-</u>	9 <u>-</u>	0 <u>-</u>	3 <u>-</u>	51 <u>-</u>	63 <u>-</u>
Total			220	11	12	2	3	105	106

^{1/} To be used only upon request of plant management or import broker.

^{2/} Alternate plan for the applicable lot size for reinspection of
rejected lots and for lots consisting of numerous marks.

3. Complete MP Form 450-1. Evaluate individual (30 pound) sample unit limits and cumulative total limits.

4. Reject, hold, and recondition product when defects exceed limits. Immediately inform the inspector. If he is on patrol assignment, notify at his next visit.

5. Before resuming online inspection, follow lot inspection procedures until 60,000 pounds or 2 days' production is completed (whichever is less).

6. File completed MP Form 450-1 for 1 year. The file must be readily available to MPI personnel.

(2) Inspector. He shall (1) assure that plant personnel properly judges defects, (2) inspect a 30-pound sample unit four times a day or two 30-pound sample units on each patrol visit, or product available at time of visit; (3) observe carcass cleanliness before boning; (4) if a rejection limit is reached, confirm that all product on hand is cleaned and reinspected; (5) if unacceptable product is passed by plant personnel, enforce product lotting and holding, and insist on lot-by-lot inspection under his close surveillance until he feels plant inspection may resume; (6) assure that plant's rejection is followed by lot inspection until 60,000 pounds or 2 days' production of boneless product is produced before resuming online inspection.

18.12 SHIPPING; RECEIVING

Boneless meat and bulk-packed ground product in closed and marked containers (not casings) need not be shipped under seal to other plants or warehouse.

* (a) Record

The shipping and receiving plant shall:

1. Maintain records of each boneless meat shipment. Include date, product description, quantity, number

of pieces or units, and origin or destination.

2. Provide such records for review when requested by MPI employees.

(b) Species Identification Sampling *

Inspector shall sample for species identification as directed by RD. Sampling should include lots of domestic or imported boneless meat from: (1) warehouses, (2) other plants, (3) any source when suspicion arises from character of product, condition of container, or lack of proper identification.

Samples shall be submitted to the microbiology laboratory (see Part 23).

18.13 DEFECT CRITERIA

Use Chart 18.1 for classifying the defects found on boneless meat from cattle, calves, sheep, and goats. Use Chart 18.1-A for classifying the defects found on boneless meat from swine. *

Chart 18 1 - Defect criteria (for sample unit).

*

Meat from cattle, calves, sheep, goats, and equines.

*

Defects			
Type	Description	Class	Code
Blood clots	Less than 1½" in greatest dimension	*Insignificant	
	1½" to 6" in greatest dimension.	Minor	100
	More than 6" in greatest dimension, or numerous (over 5) minor blood clots in one sample unit (1/) not seriously affecting product usability.	Major	101
	One or more of a number or size seriously affecting product usability.	Critical	102
Bruises	Less than 1" in greatest dimension and less than ½" deep.	*Insignificant	
	1" to 2½" in greatest dimension or ½" to 1" deep.	Minor	100
	More than 2½" in greatest dimension or more than 1" deep, or numerous (over 5) minor bruises in one sample unit (1/) not seriously affecting product usability.	Major	101
	One or more of a number or size seriously affecting product usability	Critical	102
Bone fragments	(1) Thin bone scrapings less than 1/32" thick x 1/8" wide x 3" long attached to muscle tissue. (2) Thin flexible bone shivers, either attached to or detached from muscle tissue less than 1/4" wide and 3/4" long. (3) Thin bone fragments or chips either attached to or detached from muscle tissue that crumble easily and are less than 3/4" in greatest dimension.	*Insignificant	
	Less than 1½" in greatest dimension.	Minor	150
	1½" or more in greatest dimension, or numerous (over 5) minor fragments in one sample unit (1/) not seriously affecting product usability.	Major	151
	One or more of a number or size seriously affecting product usability.	Critical	152
Bone shivers (from rib)	Less than 3" long and less than 1/4" wide and flexible bone chip from a rib end more than 3/4" in greatest dimension that is thin and crumbles easily, and with or without attached muscle tissue.	Minor	150
Detached cartilage, ligaments	Less than 1" long	*Insignificant	
	1" or more long and free of muscle tissue. (See also bone shivers).	Minor	200
	Numerous (over 5) minor defects in one sample unit (1/) not seriously affecting product usability.	Major	201
	Defects of number seriously affecting product usability.	Critical	202
Extraneous material	Minute specks or dust. If affecting product usability, score them under codes 800, 801, 802.	*Insignificant	
	Pieces of plastic or paper wraps or any soft material less than ½",		
	Paper or plastic wraps ½" to 7 square inches; a single piece covering an area equal to that of a circle 1/8" to 1/2" in diameter; a wild oat or other grass beard over 3/8" long or 3 or more pieces of wild oats or grass beards 1/8" to 3/8" long on one meat piece and without inflammation.	Minor	300
	Blunt piece of wood 1" or more long, paper or plastic over 7 square inches, single piece of material covering an area greater than that of a circle with a diameter exceeding ½"; small insects without insanitation. Numerous (over 5) minor defects in a sample unit not seriously affecting product usability; any substance causing minor bodily irritation or discomfort (chemicals, hard objects, etc.).	Major	301
	Any substance causing injury or illness (poisonous or toxic chemicals, sharp pieces of metal, glass, hard plastic, etc.); large insect, insects associated with insanitation, or any material of number or size seriously affecting product usability.	Critical	302

*

Note: See footnote at end of chart.

★ Chart 18.1 - Continued ★

Defects			
Type	Description	Class	Code
Hair Hide Wool	Hide (with or without hair) or wool less than $\frac{1}{4}$ " in greatest dimension. A total of five to 10 single strands of hair or wool. Total number of hairs, divide by 10 and round off to nearest whole number to determine total hair defects. For example, 34 hairs equal 3 defects and 35 hairs equal 4 defects. When second step is necessary, total number of hairs in step one and two, divide by 10 and round off to nearest whole number as described above. Also a cluster of hair (strands too numerous to count) in one area.	Minor	400
	Hide (with or without hair) or wool $\frac{1}{4}$ " or more in greatest dimension, numerous (over 25) single strands of hair in one sample unit ($\frac{1}{2}$), numerous (over 5) clusters of hair in one sample unit ($\frac{1}{2}$), provided none of above seriously effect product usability.	Major	401
	Hair, hide or wool of amount seriously affecting product usability.	Critical	402
Ingesta	Amount equal to area of a circle $\frac{1}{4}$ " or less in diameter.	Major	251
	Amount equal to area of a circle more than $\frac{1}{4}$ " in diameter.	Critical	252
Off condition		Critical	452
Parasitic lesions	Parasites not transmissible to man. One, two, or three closely associated lesions on one piece of meat - Score as one lesion (ovine only) First lesion found in a sample.	Minor	500
	Each succeeding parasitic lesion in the sample.	Major	501
Pathologic lesions	Any lesion (not evident on post-mortem inspection) not seriously affecting product acceptability.	Major	501
	Any lesion unless excepted as noted under Code 501.	Critical	502
Stains, Discolored areas	Very light stains of any size or stains covering an area less than that of a circle $\frac{1}{4}$ " in diameter	*Insignificant	
	Equal to area of a circle $\frac{1}{4}$ " to $1\frac{1}{2}$ ".	Minor	600
	Equal to area of a circle greater than $1\frac{1}{2}$ " in diameter; numerous (over 5) minor stains in one sample unit (12 pounds) not seriously affecting product usability ($\frac{1}{2}$).	Major	601
	Minor or major areas of a number seriously affecting product usability.	Critical	602
Other	Defect that individually or in aggregate affects product appearance, but not its usability.	Minor	800
	Defect that individually or in aggregate materially affects product usability.	Major	801
	Defect that individually or in aggregate seriously affects appearance or usability of product.	Critical	802

*No significance in product wholesomeness; do not score.
1/ Do not score as minor also.

Chart 18, 1-A - Defect criteria (for sample unit). Meats from swine carcasses. *

Defects			
Type	Description	Class	Code
Blood clots	Less than 1½" in greatest dimension	*Insignificant	
	1½" to 6" in greatest dimension.	Minor	100
	More than 6" in greatest dimension, or numerous (over 5) minor blood clots in one sample unit (1/) not seriously affecting product usability.	Major	101
	One or more of a number or size seriously affecting product usability.	Critical	102
Bruises	Less than 1" in greatest dimension and less than ½" deep.	*Insignificant	
	1" to 2½" in greatest dimension or ½" to 1" deep.	Minor	100
	More than 2½" in greatest dimension or more than 1" deep, or numerous (over 5) minor bruises in one sample unit (1/) not seriously affecting product usability.	Major	101
	One or more of a number or size seriously affecting product usability.	Critical	
Bone fragments	(1) Thin bone scrapings less than 1/32" thick x 1/8" wide x 3" long attached to muscle tissue. (2) Thin flexible bone slivers, either attached to or detached from muscle tissue less than 1/4" wide and 3/4" long. (3) Thin bone fragments or chips either attached to or detached from muscle tissue that crumble easily and are less than 3/4" in greatest dimension.	*Insignificant	
	Less than 1½" in greatest dimension	Minor	150
	1½" or more in greatest dimension, or numerous (over 5) minor fragments in one sample unit (1/) not seriously affecting product usability.	Major	151
	One or more of a number or size seriously affecting product usability.	Critical	152
Bone slivers (from rib)	Less than 3" long and less than 1/4" wide and flexible bone chip from a rib end more than 3/4" in greatest dimension that is thin and crumbles easily, and with or without attached muscle tissue.	Minor	150
Detached cartilage, ligaments	Less than 1" long	*Insignificant	
	1" or more long and free of muscle tissue. (See also bone slivers).	Minor	200
	Numerous (over 5) minor defects in one sample unit (1/) not seriously affecting product usability.	Major	201
	Defects of number seriously affecting product usability.	Critical	202
Extraneous material	Minute specks or dust. If affecting product usability, score them under codes 800, 801, 802. Pieces of plastic or paper wraps or any soft material less than ½".	*Insignificant	
	Paper or plastic wraps ½" to 7 square inches, a single piece covering an area equal to that of a circle 1/8" to 1/2" in diameter; a wild oat or other grass bent over 3/8" long or 3 or more pieces of wild oats or grass heads 1/8" to 3/8" long on one meat piece and without inflammation.	Minor	300
	Blunt piece of wood 1" or more long, paper or plastic over 7 square inches, single piece of material covering an area greater than that of a circle with a diameter exceeding ½", small insects without insanitation. Numerous (over 5) minor defects in a sample unit not seriously affecting product usability; any substance causing minor bodily irritation or discomfort (chemicals, hard objects, etc.).	Major	301
	Any substance causing injury or illness (poisonous or toxic chemicals, sharp pieces of metal, glass, hard plastic, etc.); large insects, insects associated with insanitation, or any material of number or size seriously affecting product usability.	Critical	302

* * *

Note: See footnote at end of chart.

Defects

Type	Description	Class	Code
Skin Hair Hair score	Skin (with or without hair or visible hair roots) individually or in aggregate less than 1 square inch.	*Insignificant	
	Skin (with or without hair or visible hair roots) individually or in the aggregate 1 square inch to 3 square inches. A total of 2 or 3 single strands of hair or 5 to 10 visible hair roots. Total number of hairs or visible hair roots in sample divide by 3 for hairs or 10 for visible hair roots and round off to nearest whole number. For example, 10 hairs equal 3 defects. Thirty-eight visible hair roots equal 4 defects. When second step is necessary, total the hair or visible hair roots from both steps. Also, cluster of hair or visible hair roots (strands too numerous to count) in one area.	Minor	400
	Skin with or without hair or visible hair roots individually or in aggregate over 3 square inches; numerous (over 13) single strands of hair in one sample unit (1/2), provided none of above seriously affect product usability.	Major	401
	Hair, skin, or visible hair roots seriously affecting product usability.	Critical	402
Ingesta	Amount equal to area of a circle 1/2 inch or less in diameter.	Major	231
	Amount equal to area of a circle more than 1/2 inch in diameter.	Critical	232
Off condition		Critical	452
Lips Ear canals Teeth Kidney Liver	Any sample unit containing tooth or teeth. Ear canal(s), lip with or without tooth marks, piece(s) of kidney or liver.	Major	501
Pathologic lesions	Any lesion (not evident on post-mortem inspection) not seriously affecting product acceptability.	Major	501
	Any lesion unless excepted as noted under Code 501	Critical	502
Stains, Discolored areas	Very light stains of any size or stains covering an area less than that of a circle 1/2 inch in diameter.	*Insignificant	
	Equal to area of a circle 1/2 inch to 1 1/2 inch.	Minor	600
	Equal to area of a circle greater than 1 1/2 inch in diameter; numerous (over 5) minor stains in one sample unit (12 pounds) not seriously affecting product usability (1/2).	Major	601
	Minor or major areas of a number seriously affecting product usability.	Critical	602
Lung tissue	Any amount.	Critical	652
Other	Defect that individually or in aggregate affects product appearance, but not its usability.	Minor	800
	Defect that individually or in aggregate materially affects product usability.	Major	801
	Defect that individually or in aggregate seriously affects appearance or usability of product.	Critical	802

*No significance in product wholesomeness; do not score.

1/ Do not score as minor also

TENDERIZING (MEAT)

Subpart 18-C

(Regs: M-318)

18.16 PROTEOLYTIC ENZYMES

When approved proteolytic enzymes--papain, bromelin, or ficin--are used to tenderize meat cuts, their application must result in tenderization and not adulteration of product.

(a) Equipment; Personnel

Plants tenderizing meats (by injecting or dipping) shall provide adequate equipment and designate competent personnel to test product and record findings.

During testing, water bath equipment must be maintained under a plant security program acceptable to the circuit supervisor.

(b) Temperature

Water bath temperature depends on the enzyme or predominant enzyme used and can be determined by a minimum-maximum indicator thermometer.

Required temperatures for best tenderizing results are:

*	120° F. -- Ficin
	140° F. -- Bromelin
	153° F. -- Papain

Slight temperature deviations will not affect the test. However, such deviations should be within +5° F. of the required temperature during the test.

(c) Testing

(1) Tenderization.

(i) Plant. A designated plant employee will:

a. Perform at least one test weekly and additional tests when a new type of enzyme is used or when the enzyme content of a solution is changed.

1. Select one 4-ounce sample each of enzyme treated and untreated diaphragm or other muscle tissue, put each sample in a separate waterproof plastic bag, and place the bags into a water bath.

2. After 4 hours, remove the samples from the water bath and determine the extent of proteolysis--parting of muscle fibers (loosening and/or softening of intermuscular connective tissue).

When treated samples exhibit moderate to extensive proteolysis and untreated samples remain firm, allow operations to continue.

When test samples exhibit improper results, correct or discontinue the operation, segregate questionable product, and immediately inform the inspector.

(ii) Inspector. He will:

1. Periodically monitor tests and review test records maintained by the plant.

2. Request the plant to make additional tests if records or observations indicate the plant may not be meeting their responsibilities or whenever findings could assist in the disposition of questionable product.

3. Determine whether plant disposition of segregated product is adequate.

4. Submit samples of treated and untreated product and of the tenderizer to a Science laboratory only when laboratory findings are needed to assist in the disposition of questionable product, or when requested by FO.

*

(2) Moisture Pickup.

(i) Plant. A designated employee will:

1. Perform and record at least one test daily during each production shift and additional tests when the process is introduced or changed. A test includes three groups of product selected at random and weighed before and after tenderizing to determine moisture pickup. A group of steaks shall consist of 10 steaks; a group of

roasts of three roasts. Treated product must not exceed its untreated weight by more than 3 percent.

2. When excess moisture pickup is discovered, segregate and identify product represented by the test; correct the process; and inform the inspector.

(ii) Inspector. He will:

1. Review plant records at least once during each production week and determine accuracy of actions taken for segregated product.

2. Periodically monitor plant tests.

3. Perform at least two group tests during each production week, compare results with plant findings, and file records in the Government office.

4. Take appropriate actions required to assure product compliance.

(3) Quality Control Procedures.

Processors desiring to use procedures other than those outlined in (1) and (2) may submit their written proposals through the Inspector in Charge to RD. As appropriate, RD will transmit proposals to SDS.

INGREDIENTS

Subpart 18-D

(Regs: M-318; P-Subpart O)

Only approved and properly labeled ingredients shall be used in meat or poultry products.

18.19 MEAT-POULTRY ITEMS

(a) Meat

(1) Acceptance. Meat and meat food products may enter official plants, provided they comply with regulations.

(2) Record. Receiving establishment must maintain a record of all received product showing that it was from federally inspected plants.

(3) Bone. Crushed or ground bone is not permitted as ingredient in meat or poultry products. However, wholesome bones from U.S. inspected and passed carcasses may be used in manufacture of soup stock intended as an ingredient of meat food product.

Bone crushing may be conducted in edible product departments, provided it does not create an insanitary condition.

(4) Ice-glazed product. Must be clean, wholesome, and identified as federally inspected and passed. If soiled, it may be reconditioned by washing with water sprays (see Subpart 18-N).

(5) Lips. Lips of cattle, calves, sheep, and goats are permitted in meat food products provided the conical papillae are destroyed by finely chopping, or by cooking and removing the mucosa.

(6) **Pork stomachs.** They are considered meat byproducts rather than animal casings, even though they are intended for use as containers of meat food products.

(7) **Pork jowls; slicing.** Large, inverted hair follicles must be removed from pork jowls before they are used in further processing or before shipping.

Pork jowls to be used in fabricated products or in edible rendering shall be completely sliced or deeply scored from the "meat" surface downward in sections about 1 inch apart, and cut surfaces observed for abnormalities.

Pork jowls for use as "Smoked pork jowl Bacon Squares" may be processed without scoring, provided they are closely observed for abnormalities during preparation.

Mechanical slicing or scoring of unfrozen jowls is acceptable, provided (i) all cut surfaces are immediately observed for abnormalities, and (ii) acceptable facilities are available for cleaning and sanitizing contaminated equipment.

(8) **Pork skin, rinds, snouts, lips, ears.** They shall not be shipped unless they are free from visible hair roots, and are suitable for inclusion in meat food product (soupe, scrapple, head cheese, etc.).

- * Exception! Skins with visible hair
- * roots may be shipped from a producing
- * plant, provided the product name is
- * prominently qualified on each container; i.e., "Pork Skins For Popping,
- * Rendering, or Gelatin Manufacturing
- * Use Only." And further, the Program
- * is provided evidence that the product
- * will be shipped (including incidental
- * storage) to a popping, rendering, or
- * gelatin manufacturing operation.

(b) Meat and Poultry

(1) **Byproduct.** Byproducts must be properly handled and chilled or frozen

to prevent unsoundness. Occasionally they are bulk packed before chilling. In this case, freezing must be followed by further examination to detect possible unsoundness.

Byproducts must be properly drained before packing or before being used as ingredients in food products. Improper draining after washing can carry excess water into packages or manufactured food product.

(2) **Gelatin.** It may be used for binding and congealing certain meat or poultry products. It should be carefully controlled. When sampling product, show amount of gelatin used on MP Form 22.

Poultry products with more than 3 percent gelatin shall be labeled to include "gelatin added," "with gelatin," or the like. Natural gums and extracts added as jelling agents may be used only in amounts necessary for intended purpose.

(3) **Fat.** Edible fat from federally inspected plants may be brought into an official plant, if in closed and properly labeled containers, or under Government seal.

When rendered or unrendered poultry fat is received frozen, the block should be cut or broken to insure soundness.

18.20 NONMEAT-NONPOULTRY ITEMS

(a) Identification; Labeling

All materials--curing mixtures, seasonings, spices, tomato puree, cereals, nonfat dry milk, etc.--must be labeled to show name of article, list of ingredients if composed of two or more, and amount or percentage of each restricted ingredient.

Mixtures of spices or other flavoring or seasoning components--spice extractions, oleoresins of spices, essential

oils, disodium inosinate, disodium guanalate, hydrolysates of animal or plant origin such as gelatin, hydrolyzed vegetable protein, hydrolyzed plant protein, soy products, or combinations of these materials--are not acceptable for entry into an official establishment for use when premixed or blended with nitrites and/or nitrates. Such mixtures without nitrites or nitrates or those which include separate and distinctly identified packages of nitrites and/or nitrates in their containers are acceptable. This restriction does not include curing compound premixtures or blends of nitrites and/or nitrates with salts, sugars, corn syrup solids, and monosodium glutamate.

- * Manufacturers of these excluded
- * curing compounds may tint their products with FD&C Red #3 dye as an aid to easy identification. To accomplish this, each 100 pounds of tinted compound may contain up to 0.45 grams of FD&C Red #3 and not less than 3 pounds of nitrite. Cure compounds prepared according to this procedure must be labeled to identify FD&C Red #3; however, reference to this coloring need not be made on the meat or poultry product in which the compound is used.

All materials should be enclosed in sanitary containers bearing name and address of manufacturer or other qualifying phrase if other than the manufacturer, such as "manufactured for," "packed for," or "distributed by."

All approved substances listed in the regulations (318.7 and 381.147) and other nonmeat/nonpoultry items used as ingredients of meat or poultry products must be food grade types. They should be identified as "Food Grade" or "FCC" (Food Chemical Codex) on their containers, or be accompanied by a supplier's letter of guaranty. Egg and/or milk products shall be handled as outlined in 18.20(c).

Items identified as "FDA Certified," or as having been prepared in USDA

approved plants and nonfood items, such as anti-caking agents, filter aids, dry ice, artificial casings, and similar products, need not be marked "Food Grade" nor be accompanied by a letter of guaranty.

(b) Suppliers' Guaranty

Letters of guaranty are required to assure that proper food ingredients are used in meat or poultry products. The guaranty is referenced in section 303(c) of the Food, Drug, and Cosmetic Act. Definitions and suggested forms are contained in FDA regulations (21 CFR 1.5).

A guaranty may be:

1. Limited to a specific shipment or delivery of an article in which case it may be part of or attached to the invoice or bill of sale, such as:
 "(name of person or company giving the guaranty) hereby guarantees that no article listed herein is adulterated or misbranded within the meaning of the Federal Food, Drug, and Cosmetic Act."

(Signature and address of responsible person)

2. General and continuing, such as:
 "The article comprising each shipment or other delivery hereafter made by (name of person or company giving guaranty) or on the order of (name and address of person or company to whom the guaranty is given) is hereby guaranteed as of the date of such shipment or delivery to be, on such date, not adulterated or misbranded within the meaning of the Federal Food, Drug, and Cosmetic Act."

(Signature and address of responsible person)

3. Master continuing. A multiplant firm may keep a master continuing guaranty file and give each plant an updated list of suppliers.

(1) Responsibility

- (i) Plant. A guaranty does not relieve the plant from its responsibility of examining food ingredients to assure they are wholesome, nor from

subjecting them to further cleaning, washing, or otherwise preparing them according to good commercial practices.

(11) Inspector. He shall assure that the plant adheres to all requirements. If a limited guaranty is used, he shall verify approximately every 2 weeks that 10-20 randomly selected lots are covered by a guaranty.

If required letter of guaranty is not produced, items not properly covered will be retained. Subsequent lots of nonmeat or nonpoultry items shall also be retained until the plant demonstrates compliance. Regular monitoring is to be resumed when the inspector is satisfied that the plant is complying with requirements.

(c) Egg and/or Milk Products

(1) Egg products. A letter of guaranty is required for shell eggs. Other egg products must be USDA inspected for wholesomeness and carry marks as in Figure 18.1.

Plant number may be within shield or printed elsewhere on the container. If pressure-sensitive labels are used, the number must be within the shield.



Figure 18.1

(2) Dry milk products. Dry milk products such as nonfat dry milk (NFDM), whole milk, buttermilk, whey, calcium reduced skim milk, and dairy blends of any of the above, identified as USDA inspected or sampled, are acceptable if

any one of the following are met:

a. Each container is stamped with one of the inspection marks shown in Figures 18.2 and 18.3.

b. Each container is identified with a currently listed Approved Dairy Plant number along with the name and address of the plant or the name and address of the distributor.

c. Distributor provides a certificate issued by the Dairy Division, AMS, which identifies the product by code stamped on each container, product composition and quality, and number of containers it covers.

d. Each container is identified by the code of a currently listed Approved Dairy Plant (by State and plant number), along with a product name or code.

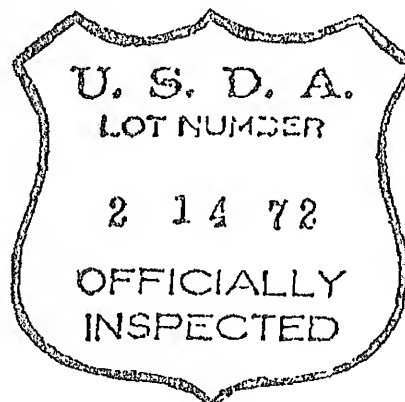


Figure 18.2

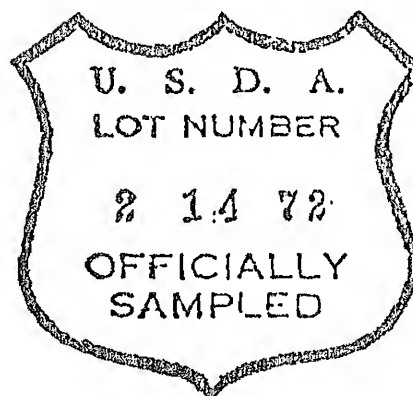


Figure 18.3

... milk, products with milk
... milk, butter, margarine,
... sodium caseinate
... dairy product deriva-
... manufactured items such as
... batters, gravies, and
... shells and macaroni
... milk or egg products
... as in (1) and/or (2)
... accompanied by a letter

(d) Identification and Sampling

The inspector will examine incoming
... of nonmeat and nonpoultry
... sample such items if he sus-
... t, microbiological, or
... contamination, or when
... by RD.

... usual examination or sample
... reveal unacceptable condi-
... those items shall be immedi-
... reported from use. If such
... accompanied by a letter of
... or identified as USDA
... the appropriate authorities
... will also be notified of the
... conditions.

(e) Miscellaneous Items

(1) Anticaking agents. Approved
salt, cures, or seasonings containing
anticaking agents up to 2 percent,
... or in combination, may be used
in meat and poultry products. Such
agents are tricalcium phosphate,
tetrasodium pyrophosphate, calcium
carbonate, magnesium carbonate,
calcium stearate, silica gel, calcium
aluminum silicate, calcium silicate,
magnesium silicate, sodium aluminosilicate, sorbitol, glycerol
(glycerin), or propylene glycol.

Salt with less than 13 ppm of yellow
precipitate of soda (sodium ferrocyanide
decahydrate) is also acceptable.

Container labels must show the
presence of anticaking agents.

When salt, seasoning, or curing
mixtures containing anticaking agents
are used in product, such agents need

not be shown on product label.

The above anticaking agents shall
not be used as such in meat food
products.

(2) Vegetables.

(1) Storage. Raw vegetables should
be stored in suitable separate rooms.
Suitable facilities for preliminary
preparation of vegetables for use
in product should be provided in a
location separate from processing
areas.

(ii) Handling. Handle vegetables
without spreading dust or other
contaminants.

Thoroughly wash vegetables--celery,
potatoes, etc.--before cutting.

Raw vegetables may contain metal
scraps, nails, etc. These contami-
nants must be removed. Encourage
plant management to use magnets on
vegetable lines to detect them.

(iii) Lye solutions. They may be
used for removing vegetable's outer
surface or peel, provided lye is
completely removed before further
processing.

(3) Mustard. When mustard is used
in product with a water limitation,
it is restricted to 1 percent of
finished product because of its high
protein content.

(4) Spice Mixtures. They shall
provide not more than 0.35 percent
of protein by laboratory analysis.

(5) Preservatives. Preservatives--
sodium benzoate, benzoic acid, or
sulfites--are permitted in products
only when incidental to other ingre-
dients such as candied fruit and
dehydrated vegetables. These inciden-
tal ingredients need not be declared
on the label.

(6) Salt; pickle. Salt or salt
solutions (pickle) contacting prod-
uct must be clean and free from

extraneous materials, including rock or slate particles. Recrystallized, vacuum-pan granulated salt, or salt with approved anticaking agents--tricalcium phosphate, calcium, or magnesium carbonate--is acceptable.

Salt solutions for curing, defrosting, etc., shall be clear. Rock salt used for such solutions may contain only insoluble mineral matter--slate or rock particles.

Reuse of pickle. Pickle, including cover pickle, may be reused if clean, clear, and wholesome. Sanitary collecting equipment and efficient filtration should be available. All pickle lines should be of stainless steel or approved plastic. Those carrying salvaged pickle must be demountable for cleaning.

Facilities and equipment for storing and/or handling salt or salt solutions shall be kept clean and shall be so constructed to prevent contamination.

18.21 CONTROL

The inspector must monitor use of all materials which are approved for "specific use only." When a substance appears improper for use or altered from approved material, he should submit samples to the laboratory.

(a) Restricted Ingredients

Curing mixtures with sodium or potassium nitrite, or sodium or potassium nitrate must be clearly marked and kept under the control of a responsible plant employee.

Establishments must avoid improper use of restricted ingredients--nitrites, nitrates, cereals, etc.--(see regulations).

Unless otherwise approved by MPI, one of the following procedures must be followed:

1. Each restricted ingredient is properly identified and individually weighed into separate containers in single batch formula amounts.

2. A mixture is prepared containing both restricted and nonrestricted

ingredients (excluding NFDM, cereal, soy products). "Single-batch" formula amounts of the mixture are weighed. Each container must bear (a) product name; (b) each ingredient listed in predominant order; (c) percent of restricted ingredients; (d) net weight of mixture and total weight of batch; (e) a statement including that "the plant certifies that a sample of the lot has been chemically analyzed, found acceptable and within label's limitation, and that "X" pounds of the mixture in "X" pounds of raw product will produce a finished product complying with regulations."

Source ingredients for any mixture shall be available for sampling before mixing. Finished mixture shall be available for verification sampling before use.

When verification samples indicate ingredients noncompliance, or when management neglects to follow above procedure, the inspector requests return to procedure in item 1.

(1) Calcium or sodium caseinate. *
Adulteration with calcium or sodium *
caseinate in sausage and meat loaves *
is due not only to the use of unaccept- *
able ingredients, but also to their *
high protein content which facilitates *
adulteration of product with water. *
Inspectors should use specific con- *
trol measures to prevent their use in *
sausage or meat loaves. Basic con- *
trol features should include:

1. A continuous inventory of cal- *
cium or sodium caseinate amount on *
hand and amount used daily.

2. A daily balancing of amount of *
product containing calcium or sodium *
caseinate and amount of calcium or *
sodium caseinate present.

3. Occasional requests for calcium *
or sodium caseinate analysis in *
samples submitted to the laboratory.

MPI supervisors should assist inspectors in developing adequate controls and assure that such controls are continuously effective.

(2) Soy Product. The inspector must assure that they are properly used. Approval of soy flour, soy protein concentrate, and isolated soy protein as ingredients of sausage is based upon their binding properties. These substances are also permitted as ingredients of other meat food products--chili, stew, loaves (other than meat loaves), soups, etc.

Soy products with appearance of diced, flaked, or ground meat, even though labeled as "soy flour," "isolated soy protein," and "soy protein concentrate" should not be used in meat food product unless specifically approved by MPSL. This Staff will approve labels for emulsified cooked sausages containing textured or structured soy flour, isolated soy protein, and soy protein concentrate, provided the textured or structured products are finely divided as a part of the emulsifying process. When so used, the labeling declaration of the soy products should not show the words "textured" or "structured."

In all cases, soy products must be identified by their common or usual name in the ingredients statement and/or by byproduct name, as required by regulations or label approval. Soy bean derivatives for which the category or protein content is questionable should be submitted to the laboratory. Soy protein concentrate, soy flour, and isolated soy protein are practically indistinguishable by visual examination. They may also closely resemble sodium caseinate, nonfat dry milk, and certain cereals. Therefore, if a plant stocks more than one type of soy product, additional controls are required. These include developing, with the plant, a procedure for confining soy products for positive identification and maintaining daily records showing amounts of soy bean derivative used and type of product prepared.

(b) Formula Control

Approved label formulas must be

controlled at plant level. Since all products cannot be verified by laboratory analysis, the inspector should check the weight, calculate the percentage of ingredients, and assure that product is properly formulated.

The inspector should also check plant records of ingredients and assure that amounts used correspond to product produced.

(c) Confidential Formula

Ingredients with confidential formulas (spice mixtures, seasonings, etc.) may be used in products, provided they are specifically identified in the label approval. Confidential formulas are reviewed for acceptability, and label's ingredient statement verified for accuracy. The inspector's responsibility limits use of such materials to identified brands in specified amounts. Substitutions are not permitted without approval.

Exception! Certain materials--mayonnaise, ketchup, bakery products, cheese, margarine, etc.--have an official 'standard of identity (or composition) registered with FDA. When used in products, a confidential formula for each is unnecessary for label approval. Different brand name products may be interchanged without MPSL clearance. However, substituted product must carry the same product name--mayonnaise, ketchup, etc.

(d) Material Rejection

Nonfood ingredients rejected for use may be removed from the plant or destroyed at the plant. If removed, FDA and local health authorities should be notified.

SAUSAGE (MEAT)

Subpart 18-E

(Regs: M-318, 319)

18.23 FRESH PORK SAUSAGE

Sampling, Compliance

When surveillance is limited, submit occasional samples to laboratory. Take corrective action when percent water in sample exceeds limits in Table 18.1A.

Table 18.1-A -- Percent of Allowable Water ^{1/}

Product Formula	Maximum Individual Sample Result	Maximum of three Consecutive results
Water	5	3
No Water	2	0

^{1/} Allowances for water are because of analytical variations and the method of calculating added water in sausage

If product is suspected of excess added water, submit two samples from different parts of the lot. Retain if the average is: Four percent or more if water is declared; or 1 percent or more if no water is declared.

18.24 COOKED SAUSAGE

This section covers cooked sausages subject to fat and/or added water limitations

(a) Casings

(1) Vinegar, lactic or citric acid.

Their solutions may be used for acidification purposes. To improve peeling, the establishment may soak casings or spray cooked sausage before and/or after cooking, using any one of the following solutions; up to 4% citric acid; or up to 7% lactic acid; or up to 4% acetic acid (40 grain vinegar).

These solutions may be recirculated during the day's operation if they are effectively filtered and are clear. Solutions must be discarded daily. The equipment must be of approved plastic or stainless steel.

Spray heads, filters, and pumps must be capable of being dismantled for cleaning.

(2) Unapproved Substances. Animal casings (318.6(b)(2)) preflushed and packed in solutions containing unapproved substances--antibiotics, antioxidants, preservatives, nitrite, nitrate, etc.--are not permitted. When noncompliance is suspected, the inspector should submit samples of casings and solutions to the laboratory.

(3) Approved dyes. Artificial casings impregnated with soluble approved dyes may be used for small sausage varieties (318.7(c)(3)). The certification required for coal tar dyes (318.7(c)(4)) should be furnished with each lot of such dye-impregnated casings.

(4) Color penetration. Examine artificially colored product. If, within 72 hours after stuffing, product shows color penetration, retain for appropriate disposition. Do not ask laboratory to examine product for color penetration.

(5) Rework. This term applies to a fully or partially processed product (not including uncooked trimmings) rerouted for reasons other than unwholesomeness or adulteration (i.e., emulsion residue, product breakage, slicing operations, smoked meats, returns, etc.) and intended for inclusion in cooked sausages, loaves, and similar products. Rework may be used provided it does not adulterate the product, violate its standard of composition, upset the order of predominance of ingredients, or perceptively affect the normal characteristics of the product, and is subject to the following restrictions:

a. Cooked sausage, meat loaves, may be used in similar products

without limitation.

* b. Except in products covered by section 319.180 of the regulations, pieces of cooked and/or smoked meat may be used without limitation if properly identified in the ingredients statement.

c. Pieces of uncooked, cured pork from primal parts may be used without limitation, if properly identified in the ingredient statement.

d. Bacon may be used in cooked sausages covered by section 319.180 of the regulations. However, it is limited to 10 percent of the meat; or meat and meat products; or meat, meat by products, and poultry products in a sausage formula.

e. Sausage products in edible collagen casings may be used in similar finely comminuted products without limitation and need not be peeled.

f. Finished cooked sausage in natural casings may be used in similar finely comminuted products without limitation, except sausages in bungs, middles, beef rounds, bladders, stomachs must be stripped of the casing before use. Also, natural casings of any type that break during the stuffing operations should not be included in emulsions.

g. Semi-dry/dry sausage (other than rework that occurs during stuffing) may only be used in products processed to reach an internal temperature of 140° F. for 50 minutes, 145° F. for 5 minutes, or 150° F. or more momentarily. Rework which occurs during stuffing may only be used in subsequent production of semi-dry or dry sausages.

Processors desiring to use rework from semi-dry/dry sausage in other products may submit their written proposal through the area supervisor to STS-ISR.

(b) Precooked Product

Precooked specialty items stuffed in natural casings--pork stomachs, bungs, bladders, etc.--must be reheated to an internal temperature of 66° C.

(150° F.) or higher after stuffing.

Exception. This requirement may be waived whenever the inspector in charge is satisfied that the product was stuffed into natural casings which were held a minimum of 14 consecutive days in a brine solution of at least 26 percent salt by weight, or a salometer reading of 100°, or they were held a minimum of 21 consecutive days in a covering of salt (rock, flake or granulated.)

(c) Ingredient Calculation

The following examples show methods of calculating ingredients in cooked sausage. They are based on 10 percent added water by weight. In practice "added water" is calculated amount of water based on standard protein-moisture ratio. If the calculated amount of ingredients indicates the plant formula may result in finished product violation, the inspector should advise plant management, observe product preparation, establish true finished product yield, calculate the true percentage of ingredient based on the actual yield, and if violation is indicated, retain product and submit samples to the laboratory.

Example 1. Cooked sausage (Standard for NFDM 3 1/2 percent; added water 10 percent).

Problem. How much NFDM may be added to a batch containing 400 pounds of meat, seasonings, and other ingredients excluding ice (water) and extenders?

Procedure:

$100\% - (3\frac{1}{2}\% + 10\%) = 86.5\% = 0.865$; $400 \div 0.865 = 462.4$; 462.4×0.035 or $3\frac{1}{2}\% = 16.2$. The 16.2 pounds is the weight of NFDM that may be added if other extenders are not used.

Example 2. Regular cooked sausage (ISP = 2 percent or NFDM = 3.5 percent).

Problem. How much NFDM may be used if 4 pounds of ISP are also to be added to a batch with an ingredient weight of 380 pounds (excluding water

and extenders)?

Procedure.

1. Determine weight excluding water and extenders as if the only extender is ISP.

2. Find theoretical finished weight: $380 \div 0.88 [100 - (10\% \text{ added water} + 2\% \text{ ISP})] = 431.8 \text{ lbs.}$

3. Find maximum amount of ISP permitted: $431.8 \times 0.02 = 8.6 \text{ lbs.}$

4. Find what equivalent amount of NFDM is permitted after 4 pounds of ISP that could be added. The equivalent amount of NFDM = $\frac{3.5}{2} \times 4.6 = 8.05 = 8.1 \text{ lbs.}$

Answer: If 4 pounds of ISP are added, then maximum NFDM that can be added in this formula is 8.1 pounds.

Example 3. Frankfurters

Problem. How much ISP may be added to a batch beginning with 105 pounds of meat seasoning, and other dry ingredients with 2 pounds of NFDM?

Procedure.

1. Find theoretical finished weight as in previous examples: $100 - (3 \frac{1}{2} + 10) = 86 \frac{1}{2}\%$. $105 \div 0.865 = 121.4 \text{ pounds.}$

2. Find total allowable NFDM: $121.4 \times 0.035 = 4.2 \text{ pounds.}$

3. Find equivalent amount of ISP that can be added with 2 pounds of NFDM: $4.2 - 2 = 2.2$. Equivalent ISP = $\frac{2}{3.5} \times 2.2 = 1.3 \text{ lbs.}$

Answer. 1.3 pounds of ISP may be used with 2 pounds of NFDM in the formula.

(d) Corn syrup, sorbitol solids

Corn syrup and/or sorbitol solids are permitted in cooked sausage not to exceed 2 percent alone or in combination.

To determine the maximum amount of corn syrup and/or sorbitol solution permitted, calculate the weight of dry solids permitted and convert to weight of liquid.

Example. Product is to contain corn syrup solids and cereal, or sorbitol and cereal. Weight of ingredients other than water, cereal, and

corn syrup solids or sorbitol is 260 pounds.

Problem. Find maximum amount of either corn syrup and cereal or sorbitol and cereal permitted in formulation.

Procedure.

1. $260 \text{ pounds} = 100\% - (10 + 3 \frac{1}{2} + 2) = 84 \frac{1}{2}\%$.

2. Solve for finished weight: $260 \div 0.845 = 307.7 \text{ lbs.}$

3. Calculate weights allowed: Corn syrup solids = $307.7 \times 0.02 = 6.2 \text{ lbs.}$

Sorbitol solids = $307.7 \times 0.02 = 6.2 \text{ lbs.}$

Cereal = $307.7 \times 0.035 = 10.8 \text{ lbs.}$

4. If corn syrup is used, consider syrup as 80% dry solids:

$6.2 \div 0.80 = 7.75 \text{ lbs.}$ corn syrup. *

5. If sorbitol is in solution, the U.S.P. or N.F. solution is 70% solids: $6.2 \div 0.70 = 8.9 \text{ lbs.}$ N.F. sorbitol solution.

Remember that water is a part of any syrup or solution. Combinations may be calculated as in examples 2 and 3 of 18.24(c).

(e) Definitions and Explanations for Lot Inspection

(1) Lot. A shift's production of one size and basic formula or specification.

(2) Sampling. Divide monthly (or weekly or daily) production by 35,000 to determine the number of lots to sample for both normal and tightened inspections. However, regardless of production volume, samples must be taken as limited by Table 18.3. Sample the lots most likely to be in violation. Sampling rate may not be increased for the purpose of hastening the return to normal criteria. Select three 1-pound units of finished, unpackaged product. Each unit should represent different batches from one lot (do not composite). The inspector must be familiar with production methods and confirm that operations indicate compliance

11. 6. 1951

3. Petrol samples. Samples may be collected at level as directed.

4) Records - The scoresheet (MP
... for fat and one for added
... to be maintained for all
... products combined that
... both fat and added
... A separate

* scoresheet shall be maintained for
 * added water for cooked sausage not
 * limited by the regulations to 30 per-
 * cent fat but limited to added water.
 * An added water violation in products
 * with added water and fat limitations
 * would not affect the inspection level
 * or retention of products with only
 * added water limitations.

* (5) Zone concept. Sample limits
 * are to allow variation due to normal
 * sampling and analytical error. Prod-
 * uct will be in compliance if proper
 * actions are taken.
 * If a product is on tightened inspec-
 * tion for one factor, (fat or water) a
 * Zone C or D in another factor does not
 * mean retain product. To determine
 * proper inspection criteria laboratory
 * results or other factors must also be
 * accumulated.

* (f) Laboratory Results
 * Sample limits. The laboratory
 * result limits in Table 18.2 are
 * allowed for expected variations due to
 * normal sampling and analytical proce-
 * dures.

Table 18.2 - Sample limits

Zone	Percent	
	Fat	Added water
A	30.0 - under	10.0 - under
B	30.1 - 30.6	10.1 - 11.0
C	30.7 - 31.1	11.1 - 12.0
D	31.2 - 31.6	12.1 - 13.0
E	31.7 - over	13.1 - over

Table 18.3 - Sampling criteria

Normal		Tightened	
Minimum	Maximum	Minimum	Maximum
One a month	One a shift	One a week	One a shift

(g) Lot Inspection Procedure

Under Lot Inspection, two standards
 for sample results are used--normal
 acceptance criteria and tightened
 acceptance criteria. Normal accep-
 tance criteria are used for the first
 sample and continued when the samples
 consistently meet these criteria;
 tightened acceptance criteria are
 used when samples fail acceptance
 under normal criteria and are conti-
 nued until results cause a return to
 normal criteria according to the
 rules specified. The inspector shall
 record and maintain a record of labo-
 ratory results.

(1) Normal Acceptance Criteria.

When on normal criteria and the last
 laboratory sample result is:

a. Zone A, B, or nonconsecutive C;
 do not take action against product
 and continue on normal criteria.

b. Zone D, or the second consecu-
 tive Zone C, or the seventh consec-
 utive result above Zone A; do not
 take action against the product pro-
 duced on the shift represented by the
 sample but go to tightened criteria
 for the next sampling. Retain all
 product produced after the shift from
 which the sample was taken subject to
 sampling and acceptance rules under
 tightened acceptance criteria (Sec.
 18.24(g)(2)).

c. Zone E; retain all product pro-
 duced on the shift represented by the
 sample and go to tightened criteria.
 Retain all product produced after the
 shift sampled and proceed the same as
 for Zone D above.

(2) Tightened Acceptance Criteria.

The sampling rate will continue at
 the same rate as for normal criteria
 subject to the limitations in Table
 18.3. When on tightened criteria and
 the last laboratory result is:

a. Zone A (except for the fourth
 consecutive) or Zone B, release the
 shifts production and continue on
 tightened criteria and continue
 retention of subsequent production.

- * b. The fourth consecutive Zone A
 - * from four consecutive production
 - * periods regularly sampled; allow prod-
 - * uct to move freely and go to normal
 - * acceptance criteria.
- * c. Zone C, D, or E; retain all
 - * product from the sampled lot for
 - * rework or other MPI approved disposal,
 - * or for resampling only according to
 - * Sec. 18.24(g)(3). Continue on tight-
 - * end criteria and continue holding
 - * production pending sample results.
 - * The lots produced on the shift other
 - * than than the sampled lot may be sam-
 - * pled individually (three 1-pound
 - * units) at plant request and released
 - * lot by lot if results are in Zone A.
 - * Lots not released at this point may
 - * be resampled only according to
 - * Section 18.24(g)(3). All samples
 - * drawn from these lots mu analyzed by
 - * an MPI certified laboratory at plant
 - * expense.
- * (3) Resample Procedure. Retained
 - * lots that fail to qualify for release
 - * under the previously described proce-
 - * dures may be resampled at the plant
 - * request as follows:
 - * a. The MPI will randomly select 30
 - * individual 1-pound units from each lot.
 - * Each sample unit must be individually
 - * analyzed. For the release of the lot,
 - * all 30 individual results must average
 - * Zone A and no individual result may be
 - * in Zone E.
 - * b. All samples drawn from MPI
 - * retained lots must be analyzed by an
 - * MPI certified laboratory at plant
 - * expense.
- * (h) Approved Quality Control Procedure
 - * (1) Plant. Plants shall submit
 - * their control procedure through the
 - * inspector in charge to STS-SDS for
 - * approval. Such procedure must con-
 - * trol the product during preparation,
 - * must be current, include laboratory
 - * analyses of samples, and include
 - * proper action when product fails to
 - * comply with regulations. Records of
 - * analyses and formulations must be
 - * readily available to the inspector.
- * (2) Inspector. (See Subpart 18-A,
 - * section 18.6, and Definitions herein)
 - * Submit an average of one verification
 - * sample (consisting of three units,
 - * approximately 1 pound each from three
 - * different batches from one lot) a
 - * week to the Government laboratory
 - * without giving a portion to the plant.
 - * The average of one sample per week is
 - * submitted regardless of the types or
 - * volumes of different products pro-
 - * duced. The laboratory used by the
 - * plant in conjunction with the quality
 - * control program may or may not be by
 - * a certified laboratory. If analysis
 - * is by a certified laboratory the test-
 - * ing is part of the approved quality
 - * control system. Companion samples
 - * should not be sent routinely to the
 - * Government laboratory. When used
 - * with an approved quality control
 - * program, the laboratory does not
 - * function as a certified laboratory,
 - * but only as part of the total quality
 - * control system. This sampling is to
 - * evaluate the total system, not the
 - * laboratory, and to verify that the
 - * process is in control. If a verifica-
 - * tion sample result is in Zone E,
 - * proceed as follows:
 - * Check whether or not plant has found
 - * a Zone E in product on same shift, and
 - * whether proper action was taken. If
 - * plant shows a Zone E and retained
 - * product, take no action. If the
 - * plant did not retain product, do not
 - * take action against product but
 - * recheck plant records and procedures.
 - * Warn the plant of the Zone E result.
 - * If a second Zone E is found by regu-
 - * lar verification sampling within a
 - * 6-month period and no product has been
 - * retained by the plant, the inspector
 - * may rescind procedure approval and
 - * revert to "Lot Inspection" beginning
 - * with normal criteria.
- * (i) Sampling Procedure Options for
 - * Approved Quality Control
 - * Option 1. Selection of verification
 - * samples. The inspector shall draw
 - * samples at least daily and keep sam-
 - * ples under security until a week of

production has been sampled. From these samples randomly select one verification sample (three 1-pound units) for submission to MPI laboratory. The inspector may bias the sample selection by selecting the sample from a suspect lot of production. The remaining samples are to be returned to the plant unmarked so that lot is not identified.

Option 2. When requested by the establishment, sampling may be conducted to provide both MPI verification samples to MPI laboratories and companion samples to the plant certified laboratory. The inspector shall sample as in (1) above except collect duplicate samples daily (two 1-pound samples each time for a total of six). Both sets of three 1-pound samples are to be numbered with a three digit sample number starting with 101. When 999 is reached start again at 101. One of the dual samples (three 1-pound) is given to the plant certified laboratory daily. For the selection of verification sample(s) to submit to MPI laboratories, follow instruction in Option 1 above. Complete Block 13 of the MP Form 22 by stating "Verification and companion sample to certified laboratory, sample number ____." MPI laboratory verification results will be returned to the inspector on MP Form 22. The results will be used only as a verification check upon the process control of an approved quality control procedure. The inspector should not conduct a comparison check of certified laboratory's analytical capability.

18.25 DRY, SEMIDRY SAUSAGE

(a) Mineral oil

To prevent mold growth, mineral oil may be used on casing exterior after curing and drying as prescribed by regulations (Part 318).

* (b) Casings

- * To facilitate peeling, casings
- * intended to be removed from dry or
- * semidry sausage at the producing establishment may be soaked in any

one of the following solutions: up to 4% citric acid; or up to 7% lactic acid; or up to 4% acetic acid (40 grain vinegar) prior to stuffing, or the casings may be sprayed with such solutions immediately after stuffing. Care must be taken to assure that soaked or sprayed casings are thoroughly drained to remove excess moisture.

*
*
*
*
*
*
*

(c) Water, wine

*

When water is used as a solvent for curing ingredients and so added to gain a more even distribution, or when wine is added as a flavoring to certain kinds of sausage processed under limitations prescribed in the regulations (MR-318), it is permissible to add not more than approximately 1/4 of 1 percent of water or 1 percent of wine to sausage of the type that is treated for destruction of possible live trichinae by any one of the methods prescribed in regulations (MR-318). When used, such ingredients should be shown in the ingredients statement in order of their percentage content.

CURING AND SMOKING

Subpart 18-F

(Regs: M-318; P-Subpart 0)

18.28 CURING

Curing may be done by injecting and/or holding product in cure solutions containing water, salt, and other approved ingredients.

18.29 TRICHINAE CONTROL; EXEMPTION

For trichinae control, pork muscle tissue must be treated as required by regulations (M-318).

(a) Cured, Unsmoked, Product

Cured, unsmoked, and uncooked boneless pork cuts, packaged in consumer-size packages, need not be treated for trichinae. They shall be limited to 10 percent added substance.

(b) Scotch Style Ham

Cured, boned, unsmoked, rolled ham is sometimes known as "scotch style." Home cooking is customary. Therefore, trichinae treatment is not required.

(c) Hams for Armed Forces

Smoked hams purchased by the Armed Forces need not be treated for trichinae when so requested. However, they must not be diverted into trade channels unless treated by a method prescribed in the regulations.

(d) Tropic Cure Ham

Tropic cure hams for export commercially when labeled "tropic cure smoked ham" must have a water-protein ratio not in excess of 3.25 to 1 and a salt content of 6 percent. These hams need not be treated for trichinae.

(e) Fresh Cuts

Fresh pork cuts, which are further processed at the plant may be exempted from trichinae treatment, provided an alternative procedure using a pooled sample technique is used, and provided plant management can identify cuts from untreated or uncertified pork.

Procedure.

1. Combine cuts into lots of 15 units. Example: A 50-unit lot requires 3 lots of 15 and one lot of 5 for a total of 4 groups. Plant must identify lots.

2. Extract a 10-gram sample from muscle of each unit, combine all 15 samples from each lot and send to laboratory. Identify pooled samples according to the lots they represent. Obtain samples during early stages of curing but not later than 24 hours after adding salt.

3. Upon receipt of laboratory results, positive lots must be processed under "normal inspection." Those that test negative may be covered under "limited inspection" (Part 6).

(f) Country Hams

When above procedure is used with "country-cured" hams, the following additional operations must be done under inspector's general surveillance:

1. Curing (application of salt or pickle).
2. Overhaul operations.
3. Removal from cure.
4. Labeling.

The inspector must require plant records to show:

1. Lot number and origin of hams, identified with results from (d) 3 above.
2. Weight.
3. Piece count.
4. Date placed in cure.
5. Date for overhauling, smoking, and drying.

(g) Record

Of these plant records, management shall give original to inspector, keep

a copy with product, and file a copy at the plant. Local supervisors may require additional reports.

18.30 SMOKING; BARBECUING

(a) Wood, Sawdust

"Nonresinous" woods are generally acceptable for smoking. Hardwood, hardwood sawdust, corncobs, corncob meal, redwood, redwood sawdust, mesquite wood or mesquite sawdust are acceptable.

(b) Smoke and Steam

Smoke and steam can be used in modern smokehouses. In multistory, up-draft type smokehouses, combination is not permitted, but steam or smoke alone may be used. In either case, excessive condensation should be controlled.

(c) Smoking of Poultry

It may be done by heat and smoke from common or separate sources, and it is continued until a minimum internal temperature of 155° F. is reached.

(d) Barbecuing (Poultry)

Moist or dry heat is permissible. When moist heat is used, it must be indicated as part of product name.

Products, not barbecued by conventional methods but combined with barbecue sauce after cooking, must be identified as poultry "with barbecue sauce" or other wording to indicate such processing. Barbecue sauce may contain natural or approved artificial smoke flavorings.

(e) Barbecued and Smoked Poultry

This poultry product may be frozen or canned, and may be directly packaged after processing. It is considered a perishable food requiring usual precautions in handling, storing, and transporting.

18.31 SHIPPING

(a) Cured hams

Cured hams for canning may be shipped from one official plant to another with a completed, modified MP 403, provided all shipments are properly identified to the inspector in charge at destination and hams are eligible for canning according to regulations.

(b) Cured boneless pork

Cured boneless pork treated for trichinae need not be shipped under seal if it bears the mark of inspection.

Plant management shall provide adequate facilities for controlling boneless pork loins during curing, or shall adopt operating practices to prevent shipping untreated, cured, boneless pork loins.

18.32 CONTROL

(a) Plant

Management is expected to (1) control all restricted ingredients and procedures--curing, smoking, chilling, etc.--to assure product compliance, and (2) adopt uniform procedures to prevent product variations.

(b) Inspector

He must assure that product meets regulation requirements. He should (1) know plant's production practices and control procedures to evaluate their effects on finished product; (2) frequently observe amount of ingredients used; and (3) calculate percent of curing solutions injected into product to assure restricted ingredients are properly used, and pumping procedures are uniform.

(c) Plant Procedure Chart

An up-to-date procedure chart, similar to chart 18.2 and completed by the plant, shall be on file in the inspector's office.

When plant management needs to change processing procedures--pickle

formulation, pumping percent, smoke-house or cooler shrink, etc.--the inspector in charge shall be notified, and a new chart shall be made to reflect the change.

(d) Thirty-thirty Test

Accuracy of pumping operations can be checked by the 30/30 test.

Plant management shall provide necessary help (labor) and equipment, lot hams or picnics in 2- or 3-pound weight ranges, and identify intended purpose (e.g. cooking, canning, etc.).

Rapidly select 30 pumped hams, representative of the lot production, allow 30-minute drain, and weigh. Select 30 unpumped hams from same lot and weigh.

Calculate percent gain and compare with procedure chart. Pump percent may be considered correct if percent gain does not vary more than 3 percentage points from listed pump. Record all test information--date, weights, percent yield, etc.

When calculated percent pump exceeds 3 percent of listed pump, the inspector:

1. Informs plant management to take immediate corrective action.

2. Either retains overpumped product to drain into proper percent, or retains finished product pending laboratory analysis.

(e) Shrink Test

The inspector should know product shrink expected from each listed process. Smokehouse and cooler shrink should be checked on weight-in/weight-out basis.

(f) Laboratory

(1) Sampling. To confirm compliance product shall be sampled as often as necessary or as directed.

The final determination of product compliance is by laboratory analysis and calculation. Table 18.4 shows protein multipliers and estimated yield formula used.

Chart 18.2 - Plant procedure

Product Name _____		Wt. Range _____	
Date _____		Est. Off. Signature _____	
PICKLE FORMULA: <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p style="text-align: right;">Total Gallons _____</p> <p style="text-align: right;">Salometer _____</p> <p>Salt (lbs.) _____</p> <p>Sugar (Dextrose) _____</p> <p>Corn Syrup (lbs.) _____</p> <p>Phosphate " _____</p> <p>Ascorbate " _____</p> <p>Nitrate " _____</p> <p>Nitrite " _____</p> </div> <div style="width: 35%; text-align: center;"> PUMP COVER <div style="display: flex; justify-content: space-around;"> <div style="border-bottom: 1px solid black; width: 40px;"></div> <div style="border-bottom: 1px solid black; width: 40px;"></div> </div> <div style="border-bottom: 1px solid black; width: 80px;"></div> <div style="border-bottom: 1px solid black; width: 80px;"></div> <div style="border-bottom: 1px solid black; width: 80px;"></div> <div style="border-bottom: 1px solid black; width: 80px;"></div> <div style="border-bottom: 1px solid black; width: 80px;"></div> <div style="border-bottom: 1px solid black; width: 80px;"></div> <div style="border-bottom: 1px solid black; width: 80px;"></div> <div style="border-bottom: 1px solid black; width: 80px;"></div> </div> </div>			

CURE CYCLE:

Percent pump _____

Drain time _____

Time in C. Pickle _____

*

Table 18.4 - Protein multiplier and estimated yield ^{1/}

	Product			
	Smoked		Canned	
	Hams	Picnics, butts, and misc.	Hams, loins, other pork	Picnics

*

Protein multiplier 3.79 4.00 3.83 3.93

^{1/} Estimated yield = moisture + salt - (protein multiplier x protein) + 100

Table 18.5 - Sample limits for smoked or cooked pork product

Smoked product	Single sample limits		Average sample limits	
	I-A	I-B	II-A	II-B
Hams	± 5.8	+ 5.9 - 7.4	± 2.6	2.7 - 3.3
Picnics	± 4.5	4.6 - 5.8	± 2.0	2.1 - 2.6
Butts and misc.	± 4.5	4.6 - 5.8	± 2.0	2.1 - 2.5

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(2) Results. The laboratory reports added substance or water percent.

(3) Record. The inspector shall keep a record of laboratory results showing date of sampled product, sample number, and results (see Part 23).

* (g) Acceptance Criteria

* Criteria in this section shall be used in evaluating laboratory results for added substance or added water in cured hams, picnics, loins, butts, etc.

* Use sample limits in Table 18.5 for smoked or cooked products. Apply "butts and miscellaneous" limits to cooked, cured pork products. Add 10.0 to sample limits of Table 18.5 for "water added" smoked or cooked products.

* Use sample limits in Table 18.7 for canned products.

* Limits in both tables are for laboratory results only. Product yields should not exceed 100 percent for smoked and cooked products, 110 percent for "water added" products, and 108 percent for canned products.

(1) Smoked product.

(i) Single results (Table 18.5).

Such sample results should not exceed the limits in I-A. Results higher than upper limits of I-A but within limits of I-B indicate "out-of-control" procedures. Do not retain product, but take corrective action (curing or smoking adjustments.)

When single sample results exceed upper limits in I-B, all products of the type represented must be retained and brought into compliance.

(ii) Five-sample average (Table 18.5). In addition to the above, the average of last five single sample results should not exceed upper limits of II-A. Product moves freely if upper limits of I-A and II-A are not exceeded.

When the average of last five samples exceeds upper limits in II-A but not II-B and the plant has a good

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compliance history, product moves freely. If such average exceeds upper limits in II-B, all products of the type represented must be retained and brought into compliance.

If the average of last five samples does not exceed the upper limit of II-A, the process is considered acceptable. Return to normal acceptance.

Calculation. When calculating the average of last five samples, limit negative results to not lower than limits in I-A (see table 18.6).

(2) Canned product (Table 18.7). It includes canned hams, picnics, loins, and similar pork products.

Inspectors assure compliance by checking plant procedures and interpreting analytical results, or by monitoring an approved plant quality control program.

(i) Definitions.

Lot. Product of a shift, size, and basic process.

Sample unit. When using normal criteria, one can of product; when using tightened criteria, a composite of six cans of product.

Normal criteria. Standards used on lot inspection when product is consistently in compliance.

Tightened criteria. Standards used on lot inspection when process is out of control.

(ii) Approved quality control. (AQC).

Plant. Establishments may offer, through the inspector, their quality control programs to STS-SDS for approval. Such programs may be based on weights, analytical results, or a combination of both. If approved, the lot inspection procedure (iii) will not be applicable. An effective AQC program must assure process control and compliance with yield requirements determined by chemical analysis.

To obtain approval, the establishment shall:

1. Outline entire program including processing procedures.

Table 18.6 - Calculation
(Smoked hams)^{1/}

Actual results	Usable limits
+7.2	+7.2
+4.8	+4.8
-6.2	-5.8
-8.0	-5.8
-5.4	-5.4
Total.....	-5.0
^{1/} Average = $-5 \div 5.0 = -1.0$	

2. List sampling plans--size, number, type, and frequency of samples; methods of analysis; acceptable levels and actions taken if levels are exceeded.

3. Proposed proper disposition of rejected product.

4. Promptly correct faulty procedures.

5. Record all analytical results and other pertinent information; make records and charts available to the inspector.

6. Obtain STS-SDS approval for program changes and keep all copies (STS-SDS and inspector's) updated.

Inspector shall:

1. Assure that all phases of the AQC program are properly implemented.

2. Send one verification sample a week to an MPI laboratory.

3. Discuss with plant management any deviations from approved procedures and report repeated violations to his supervisor. Continuation of approval is contingent upon AQC's ability to keep a process in control.

4. Make appropriate independent evaluations of analysis in those portions of the AQC program which are concerned with limit measurements.

5. Make comparison checks of results of verification testing with the results of the plant laboratory.

6. Monitor and take action as outlined in the monitoring system that is specifically structured for each AQC program.

(iii) Lot inspection. Table 18.7 shows sample limits for canned products. Analytical results are classified into Zones A through E for action to be taken on lot inspection.

When a plant does not have an AQC program, the inspector shall:

1. Assure that the plant's procedures and controls are adequate to produce a product that is in compliance.

2. Select a sample unit from one completed lot per shift. Such sample unit will represent the shift's production of all types of canned products, and shall be drawn from all

TABLE 18.7

CANNED PORK SAMPLE LIMITS

Zone	Hams, Loins Similar Pork Products	Picnics
A	108.0 or Less	108.0 or Less
B	108.1 - 110.4	108.1 - 109.5
B ₁	110.5 - 110.8	109.6 - 109.8 *
C	110.9 - 113.5	109.9 - 111.6
D	113.6 - 116.2	111.7 - 113.5
E	116.3 - Over	113.6 - Over

types of products. Sampling should be concentrated on items most likely to be in violation.

3. Send samples to an MPI or certified laboratory.

4. Maintain a record of laboratory results as shown in Chart 18.2-A and Table 18.7 and classify the results into Zone A, B, C, D, or E. Use normal or tightened criteria to evaluate subsequent sample results, retain product, or take other actions.

5. Use normal criteria for first sample and until a second consecutive Zone C result or a single Zone D or E result is received; then switch to tightened criteria. Return to normal criteria only upon receiving four consecutive results that are less than 109.6 percent yield for a sample taken from a lot of picnics or less than 110.5 percent yield for a sample taken from a lot of hams, loins, or similar pork products.

6. Take the following action when using normal criteria. Allow product to move freely until a Zone E result is received. Then retain all product remaining from that shift's production and all subsequent production pending the next laboratory result.

7. Take the following action when using tightened criteria. Retain product pending laboratory results until return to normal criteria. Release each shift's production if the sample result from a lot of picnics is less than 109.6 percent yield or if the sample result from a lot of hams, loins, or similar pork products is less than 110.5 percent yield.

Sampling retained product. At plant's request, the inspector may sample all retained lots and take the following actions:

1. An unsampled lot may be released if the laboratory result of a composite of six cans is 109.5 percent yield or less for picnics and 110.4 percent yield or less for hams, loins, and similar pork products. This procedure will be used for product retained under either normal criteria or

tightened criteria.

2. Sampled lots retained by laboratory results in Zone E may be released if the laboratory results of six samples (single cans) do not average more than 109.5 percent yield for picnics or 110.4 percent yield for hams, loins, or similar pork products and none of the results are in Zone E.

3. Sampled lots retained by laboratory results that exceed the limits in "1" above may be released if the laboratory results of 30 additional samples (single cans) do not average more than 108 percent yield and none of the results are in Zone E.

(3) Canned product further processed. It includes domestic or (inspected and passed) imported canned hams, picnics, loins, and similar pork products removed from containers at official plants for slicing, bulk packaging, etc. These products shall comply with the added substance laboratory sample limits for water cooked product in Table 18.5 under the "butts and miscellaneous" product category. Submit laboratory samples at the rate of one per 100,000 pounds production but not more than one sample every 2 weeks or less than one sample per month.

Before further processing, free juices and "added" gelatin must be thoroughly removed. Removal of gelatin shall be indicated on MP Form 22 to alert laboratory personnel that adjustment for "added" gelatin is not necessary. (See Section 23.2 for sample selection).

(5) Canned Luncheon Meat.

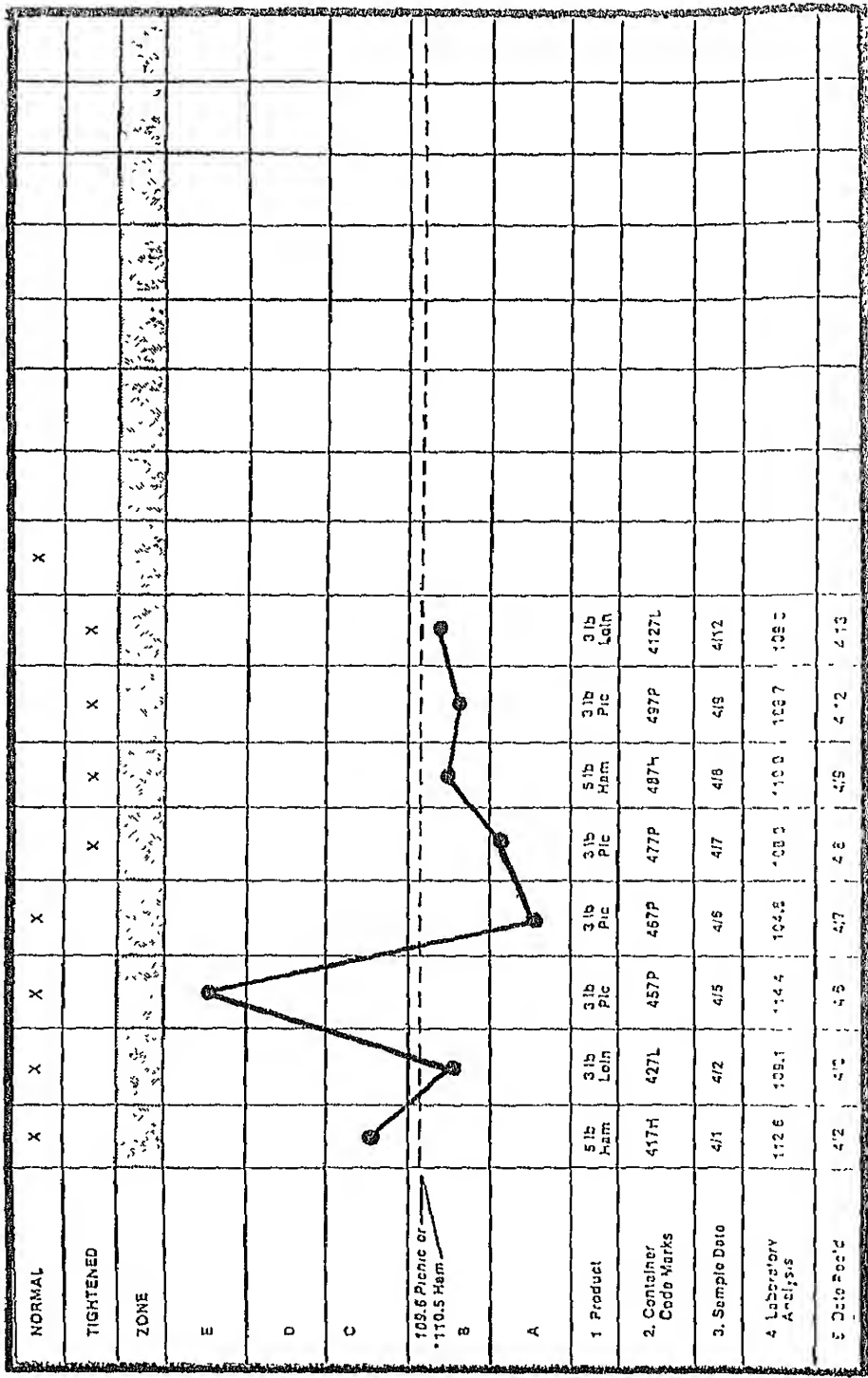
a. The Meat Inspection Regulations (Section 319.260) permits water or ice to be used in the preparation of luncheon meat in an amount not to exceed 3 percent of the total ingredients. The 3 percent is considered to be a lot average limitation. Although the standard is to be controlled at time of formulation, laboratory analyses can be used to verify effectiveness of

* the formulation controls. Sampling
* and interpretation procedures are as
* follows.

* b. A single unit sample will be
* drawn and tested from each lot chosen
* for examination. To compensate for
* analytical variation, the lot will be
* passed if the sample unit does not
* exceed 4 percent added moisture. If
* the sample unit exceeds 5 percent added
* moisture, the lot will be rejected as
* containing an average above 3 percent
* added moisture or sample unit variation
* too great to allow accurate determina-
* tion of the average added moisture.

* c. If the sample unit exceeds
* 4 percent but not 5 percent added
* moisture, the establishment may
* either (1) consent to rejection of the
* lot or (2) request that the inspector
* draw an additional 30 unit sample to be
* analyzed at the establishment's expense.
* The average of the analyses for this
* sample must be 3 percent or less
* added moisture and no single sample
* unit may exceed 5 percent added
* moisture.

Chart 18 2A - Canned Pork Products



* Return to normal after 24 hours if not tightened or after 48 hours if not tightened for canned pork products or less than 110.5 for canned ham, 110.5 for similar products

COOKING**Subpart 18-G**

(Regs: M-318; P-Subpart O)

(REFERENCE FSIS DIRECTIVE 7124.1,
7/28/86.)

18.36 CORNED BEEF HASH

The regulations state that either fresh beef, cured beef, canned corned beef, or a mixture of two or more of these ingredients may be used in preparing corned beef hash. Therefore, there are different ways of preparing product meeting the standard. Since formulas used in these calculations depend upon the nature of meat ingredients used, it is essential that inspectors note on the laboratory form the source of meat and other protein component.

Cooked meat equivalency	
Percent cooked meat in product	Fresh meat equivalency of cooked meat (Percent)
100	100
75	75
62.5	62.5
56.25	56.25
50	50

If the analysis of one sample of high known to have been made primarily from the cooked meat shows between 33 and 35 percent meat or that known to have been prepared from fresh meat shown 47 to 50 percent fresh meat, further samples should be taken to determine if the average will show 35 percent or 50 percent, respectively. Results on single sample of high prepared from cooked meat showing less than 33 percent cooked meat or one prepared from fresh meat showing less than 47 percent fresh meat should be interpreted as representing product containing insufficient meat.

Although inspection control is the principal basis for determining compliance with regulations, results of chemical analysis can be used to supplement this control. The results of analysis for fat and moisture are to be used as a basis for determining whether or not product is in compliance with respect to these components since limits on these are based on finished product.

18.37 COOKING AND BONING (POULTRY)

When poultry products or poultry food products are heat processed, the inspector assures that approved processing procedures are followed including:

1. Measurement of specified minimum internal temperature.

2. Assurance that product is processed according to type of heating.

3. Verification that finished product has characteristics typical of heating method stated on label.

To be labeled "fully cooked," "ready-to-eat," "baked," or "roasted," poultry must reach an internal temperature of 160° F, except that cured and smoked poultry rolls or other cured and smoked poultry products must reach an internal temperature of 155° F.

To measure internal temperatures, use immersion-typed meat thermometer, inserted in the thickest muscle tissue (breast and thigh, not in contact with bone tissue).

(a) Raw Poultry

Raw deboned poultry products may be heat processed by moist or dry heat, or by a combination of both.

Large portions of entire pieces of deep muscle tissue (breast, thigh, or both) are satisfactory for fabrication into a roll or log with skin and fat (not exceeding natural proportions) with seasonings and, frequently, gelatin.

(b) Open Kettle Cooking

Open kettle cooking of thawed, ready-to-cook poultry is the most common method, and may be done in steam jacketed or various direct heat kettles. Poultry carcasses of about same size are placed into kettles and covered with water or broth. Cooking at boiling temperature shall continue until meat can be readily removed without falling from bone. Good commercial practices permit two to four batches of raw poultry to be cooked in the same broth. Skinning fat and replacing moisture loss due to evaporation are usually done as conditions warrant.

Open kettle precautions also apply to pressure-type cooking procedures.

(c) Partial Cooking

Partial cooking of poultry products is not allowed. However, product to which heat is applied incidental to subsequent processing procedure may be removed from a cooker for such processing, provided it is immediately returned to a cooker in the same establishment and is fully cooked to the temperatures required by § 381.150 of the poultry inspection regulations.

(d) Chilling

Cooked poultry--whole carcass or "halves" (front or back halves)--may be chilled in air, flowing water, broth or ice. Contact with chilling liquids shall not exceed 30 minutes. Cooked individual parts--split carcasses, backs, breasts, drumsticks, thighs, etc.--may be chilled in ice, air, or water sprays with a continuous drainage. Procedures other than those listed herein must be approved by TS-PPID.

(e) Poultry Meat Rolls**(e) Poultry Meat Rolls**

When fabricated poultry meat products are not brought to sterilization temperatures, time, temperature, and cleanup must be given special attention.

The following time and temperature limitations are necessary to comply with regulations:

1. If roll cooking or roasting does not begin within 30 minutes after fabrication, rolls shall be placed in shallow pans or on wire racks to speed cooling. They shall be refrigerated immediately to 40° F. or lower until put into the oven.

2. Cooking operations should be continuous and so timed that cooking cycle is completed during plant approved work schedule. Thus, the inspector may check temperature without overtime.

3. In operations where cookout juices are recovered, take the following precautions:

- a. Juices shall be kept in a kettle at 160° F. or higher until used. Juices to be carried over to the next day, shall be put in containers of a size to facilitate cooling, and placed under refrigeration at 40° F. or lower.

- b. Natural juices may not be held more than 48 hours unless frozen.

4. Keep to a minimum any time lags which permit product to attain temperatures suitable to bacterial growth.

All equipment must be kept clean. Example:

1. Kettle and other containers shall be completely cleaned and sanitized when emptied.

2. Any equipment used must be made of a material capable of being sanitized. Brushes are not suitable for distributing seasoning on product.

3. Ovens and racks shall be cleaned as often as necessary to prevent buildup of cooked material on surfaces.

4. Cross-contamination of raw and cooked product must be prevented.

(f) Deboning

Deboning cooked poultry by hand, mechanically, or both is acceptable, provided bones are removed. The laboratory may be used as an adjunct to visual inspection to assure mechanically deboned poultry meets the requirements.

(g) Contamination Prevention

To prevent contamination, the following practices shall be permitted and receive attention by the inspector:

1. Use of knives and plastic or hard rubber cutting boards.

2. Frequent sanitizing of operator's hands during deboning and following interruption of work, and sanitizing knife handles, aprons, etc.

3. Use of stainless steel tables and deboning pans.

4. Complete rinsing of tables, floors, etc., during work interruption, at lunch breaks, and when practical at rest period, and thorough cleanup during scheduled change of work shifts.

5. Frequent dismantling and cleaning of dicing equipment, grinders, etc., (at midshift and at end of each work shift, or more frequently when deemed necessary by the inspector in charge).

6. Rapid cooling of deboned product. Cooked and/or deboned product should be processed or cooled within 2 hours from the time of exposure to room temperature.

(h) Mechanical Deboning

Mechanical deboning of poultry is acceptable provided the equipment is approved by FESD. Approval must also be obtained concerning water, salt, etc., that may be introduced to deboned end product through use of equipment.

* * *

* Plant management is responsible for assuring product compliance by supplying the inspector with bone equivalent data (R-381.117(d)). A commercial laboratory may obtain the method for determining bone equivalent by contacting the Science Program.

Product may be used or shipped before receiving laboratory results. If such results are in violation, each future lot will be held pending laboratory analysis until inspector is assured of a return to general product compliance.

Inspector shall assure that compliance is maintained by occasionally sending a production sample to MPI laboratory. Sampling frequency depends upon accuracy of plant results and compliance history.

(i) Brine Flotation

Brine flotation systems used in deboning have been approved. However, certain requirements are necessary to maintain brine and equipment sanitation:

1. Unless otherwise approved, all brine tanks shall be drained and sanitized after 4 hours of operation.

2. Reserve brine tanks shall be drained and sanitized every 2 hours.

3. A continuous overflow of brine shall be maintained during operation. Overflow shall be sufficient to maintain a wholesome solution. Special procedure in handling deboned poultry is not permitted unless outlined in approved formula for product to be further processed.

18.38 BAKING, ROASTING

(a) Meat

Pizza; trichinae control. Pizza with pork prepared and distributed frozen from preparing plant, or pizza with pork prepared on unbaked shell is classified as an article well cooked before eating and need not be treated for trichinae.

Pizza prepared on prebaked shell and refrigerated may not be sufficiently cooked; therefore, the pork must be treated to destroy possible live trichinae.

Pizza toppings with pork (mixtures of tomato paste, pork, etc.), prepared and shipped as such must be treated to destroy possible live trichinae since product's use cannot be controlled.

(b) Poultry

The term "roasted" denotes a method of cookery and not necessarily the appearance of finished product. When "roasted" is used with product name, product shall be cooked in presence of dry heat. However, such cooking may take place in presence of humidity, when added for facilitating heat transfer or efficiency.

When product is placed in a casing, the casing must be either pervious or perforated to allow drain of cooked out juices. Alternatively, a wrapping which is impervious may be turned down or removed for the final portion of cooking to provide for the drain off of cookout juices. If product is cooked through the entire cooking cycle in an impervious casing, such product does not qualify to be labeled "roasted." The finished product must have the appearance and characteristic of fully cooked, ready-to-eat foods.

18.39 STEAMING, BOILING (POULTRY)

Steaming or boiling may be done in ovens, pressure cookers, or retorts. When steam is used in direct contact with edible products, only specifically approved boiler compounds can be used.

18.40 FRYING

(a) Meat

Length of time fats and oils may be used for deep fat frying varies with temperature, quantity of new fat added daily, and fat treatment during use.

Suitability of these fats for further use can be determined from degree of foaming during use or from color, odor, and flavor.

Excessive foaming, darkened color and objectionable odor or flavor are evidence of unsuitability and require fat rejection.

Fat or oil should be discarded when it foams over the vessel's side during cooking, or when its color becomes almost black as viewed through a colorless glass container.

Serviceable life of fat can be extended by holding frying temperature below 400° F., daily replacing one-third or more, filtering as needed, and cleaning the system at least weekly.

Adding an antifoam agent (methylpolysiloxane) to new fat is helpful.

(b) Poultry

Heat processing by deep fat frying may be performed in continuous frying machines with endless belt type equipment, or in batch-type open kettles. When poultry products are precooked with moist heat, followed by battering and breading to render them ready-to-fry, they are not considered fried products of the ready-to-eat variety.

(1) Reinspection. Reinspection of poultry products before battering, breading, and frying is necessary to determine whether they are ready-to-cook.

(2) Battering and breading.

Battering and breading may be done in one operation or separately. Mixtures for battering or breading may be prepared from individual components, or they may be purchased ready-mixed. Where commercial mixtures are used, the inspector limits the use to brands specified in label approval. Those mixed at the plant are strictly limited to approved formula. Components in these mixtures must be properly listed in the ingredients statement on the approved label for the finished product.

Amount of batter and breading permitted on fried poultry parts varies

the amount of water used to hydrate the mixture and the amount of fat to be fried. The inspector should determine the amount of batter-breading on the finished product to 30 percent of the total product weight. Where necessary, during inspection sampling, the inspector removes batter-breading by weighing or other satisfactory method to determine exact amount of product.

(3) Time, Temperature. To cook poultry parts, time and temperature required depends upon the type and weight, and upon the fat used. Acceptable frying operations should be carried out at approximately 375° F or higher for 10 to 13 minutes when parts are not precooked.

(4) Frying fats; antioxidants. Fryers are especially adapted to frying and are commercially available. Commercially prepared fats may contain antioxidants or antifoaming agents. Such materials do not require a declaration in the ingredient statement on finished label. If the fryer processor adds any of these materials to frying fat, it must be noted on the approved product formula although it need not be listed in the ingredients statement.

(5) Fat acceptability. The inspector must determine acceptability of continuously used fat and reject that with impurities. Used fat may be made satisfactory by filtering, adding antioxidants, and regularly cleaning the fryer. Large amounts of sediment and fatty acid content in excess of 1 percent are usual indications that fats are unwholesome and require conditioning or replacement. Fats usually removed by filtering are fresh or new fat reduces fatty acid to acceptable levels. Some types of frying equipment are designed to continuously filter fat during operations. In all cases, fat must be filtered at

end of processing. Filter medium through which fat is filtered, must not contaminate the fat.

Maintaining frying fat in satisfactory condition is governed by amount used, type of product, and frequency and thoroughness of cleaning. Fat used for frying marine products (fish, including shell fish) is not satisfactory for frying poultry, although there is no objection to the use of fat used for frying potatoes.

Frying fat may be kept in a warm liquid form when not used, since this practice avoids localized excess heating and fat breakdown during melting, provided holding temperature does not fall below 130° F.

(6) Equipment cleaning. Cleaning of frying equipment is required at regular intervals. Continuous filtering or flushing with clean fat is satisfactory for limited periods of time. Complete drainage, followed by dismantling and scouring or otherwise thorough cleaning, is necessary for acceptable sanitizing. Traces of water and detergents increase rate of fat breakdown. They must be completely removed from pipelines, valves, filters, pumps, etc., before refilling the fryer with clean fat. All connecting pipelines, valves, filters, pumps, etc., must be of sanitary construction, readily accessible to cleaning, and preferably constructed of stainless steel. Rubber and some types of plastic connecting lines are not acceptable.

CANNING

Subpart 18-H

(Regs: M-318; P-Subpart O)

Control over canning operations assures clean and wholesome product.

18.43 PROCEDURE APPROVAL

Plant procedures and/or changes shall be approved by the area supervisor to assure they meet regulation requirements.

18.44 CANNING PROCESS

(a) Cooling Time, Water

Cooling time is part of process and should not be overlooked. Cooling water may affect process and condition of cans by hastening corrosion. Untreated (not chlorinated) cooling water may cause product spoilage by entering in minute amounts into the can through the seams. Hard water needs treatment to remove minerals affecting containers. Overuse of water treatment chemicals may destroy tin plate.

(b) Products

(1) Spoilage. Hermetically sealed product, in which spoilage exists, is always a health hazard (particularly in products with a pH greater than 4.5).

When spoilage is detected, for loss of vacuum, distended ends, etc., avoid reuse or repackaging of spoiled product.

Lack of vacuum does not in itself mean spoilage; overfilling may contribute to low vacuum.

(2) Poultry. In canning whole chickens, retort time and temperature

are affected by bird positioning and neck skin.

When birds are canned with neck down or with skin left on neck, longer retorting or higher temperature is required. Thus, plant changes in positioning or neck skinning require appropriate change in retorting time and/or temperature.

(3) Can placement. Since cooking is affected by can positioning, cans should be placed in cookers in a uniform pattern.

(c) Closures for Vacuum-Packed Glass Containers

(1) Section 317.19 of the Meat Regulations and Section 381.143 of the Poultry Regulations prohibit the use of jar closures with an annular space between the inner edge of the lid (lip or skirt) and the container. Such space must be eliminated by closure design or covered by a secondary seal to prevent filth/insects/extraneous matter from lodging in the space. For the purpose of the regulations "annular space" and "vacuum-packed" are defined as follows:

(i) "Annular Space". Will be considered to exist if an opening more than 1/8 inch in depth exists between the lower edge of the closure skirt and the sealant between the closure and container.

The three most common closures used on vacuum-packed glass jars are shown in Figure 18.4. As depicted the "quick twist" and "screw on" types have a defined annular space and would require a secondary seal such as a shrink band. Jars with "snap on" (side seal) closures generally do not have an opening which is deep enough (i.e., more than 1/8 inch) to require a secondary seal. Likewise, the "press twist" ("PT") cap (not shown) widely used on baby food jars needs no secondary seal.

Products Inspection Regulations on defective containers found before cooking may be reclaimed provided it has not (1) been held at 40 to 120° F. more than 2 hours, or (2) containers are immediately opened and product is used or cooled to 40° F. or lower.

"Vacuum-Packed Containers".

These are containers in which the internal pressure is less than atmospheric pressure within 24 hours after filling.

It is the responsibility of the manufacturer to re-charge at each establishment to ensure that glass container meets the requirements of the regulations.

(d) Equipment Breakdown

Equipment used in cooking and/or cooling shall be in good condition and shall constitute a hazard to the public with approved process. Any equipment problems that result in a delayed cook or longer cooling time shall result in prolonged retention of product. When in doubt about the equipment breakdown, the inspector shall consult his supervisor.

(e) Improper Processing, Rework

The inspector shall retain improperly processed product, record noncompliance details, and inform his supervisor.

(1) Uncooked product. Defective containers found before cooking may be opened and product may be reclaimed provided it has not (1) been held at 40 to 120° F. more than 2 hours, or (2) containers are immediately opened and product is used or cooled to 40° F. or lower.

(2) Cooked product. Defective containers found after heat processing should be opened within 1 hour if product is to be salvaged. If possible, the maximum 6-hour holding time should be avoided. Containers held more than 30 minutes after closing and before retorting may be dangerous. Delayed retorting of closed cans may result in buckles or other evidence of internal can pressure caused by gas-producing bacteria.

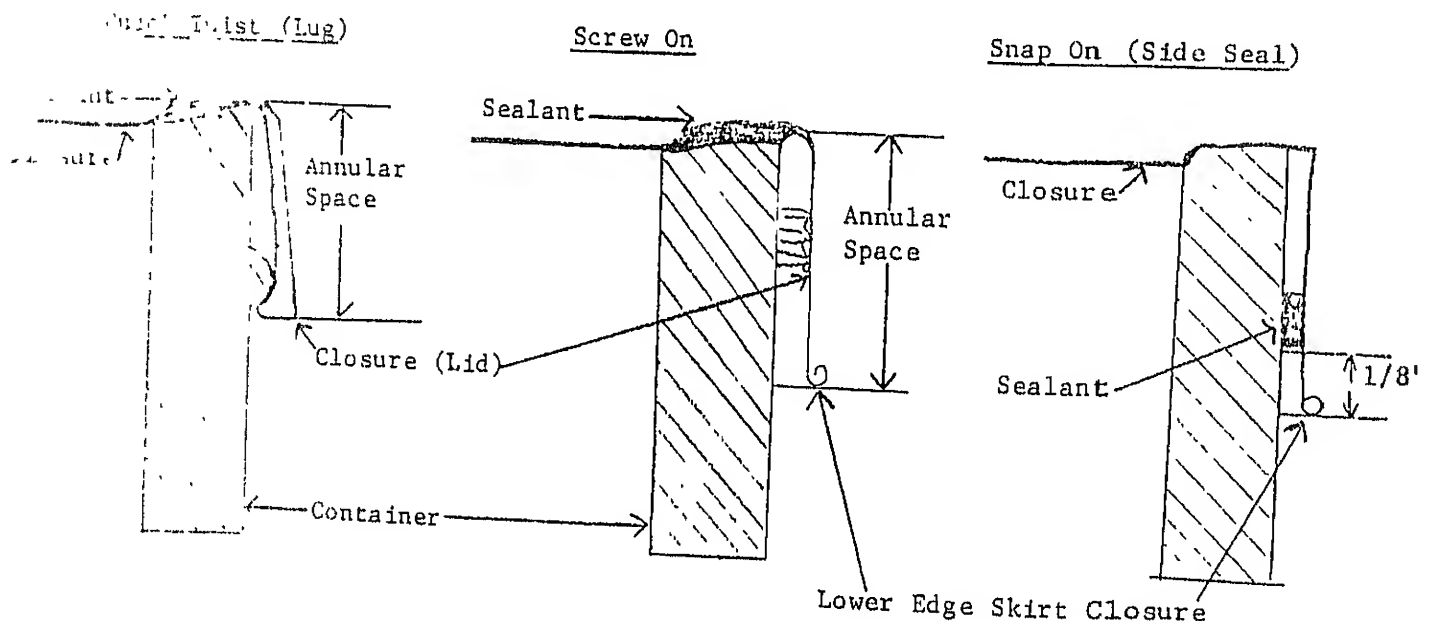


Figure 18.4

18.45 CONTAINERS

(a) Types

(1) Metal. Standard steel bodied, tin plated cans withstand severe handling.

Establishment number may be embossed on either the bottom or cover of hermetically sealed containers.

(2) Aluminum. Such cans often have a scored, tear strip for easy opening. To avoid rupture of scored areas, they should be handled carefully, and not tumbled into baskets, not embossed. Codes may be applied with ink applicators. A warning statement must appear on lids of all aluminum cans with "easy-open" features to inform consumers that a lifted tab or ring indicates defective container. For example "return if tab is lifted."

(3) Glass. Glass containers require special handling to minimize breakage. They need not be embossed, provided: (1) manufacturer's name is lithographed on the lid, (2) establishment number is either lithographed or legibly inked on the lid.

(4) Plastic. Plastic containers have been successfully used for canned cured hams. Particular care shall be taken to eliminate sharp projections or equipment in processing lines. Containers are easily punctured.

(b) Cleaning

Unfilled containers must be cleaned with filtered air or with water to remove all foreign material--dust, solder or paper particles, etc.

18.46 PERISHABLE PRODUCTS

These are products canned in hermetically sealed containers and cooked to internal temperature of at least 150° F. (meat) and 155° F. (poultry). They are not shelf-stable and must be held under refrigeration.

No approval has been given for canning uncured products under a "Perishable, Keep Under Refrigeration" warning statement.

(a) Types

(1) Product cured before canning. It includes boneless pork shoulders, pork shoulder butts, pork loins, hams, luncheon meats, meat loaves, poultry, etc., cured before canning and heating.

Meat products without cereal or starch may be processed, provided the finished product has a brine concentration not less than 3.5 percent. Meat loaves, nonspecific loaves, and similar cured product with cereal, starch or other extenders must have a brine concentration not less than 6 percent.

Brine concentration is calculated by dividing amount of salt by the sum of the total water and salt in product, determined by laboratory upon request.

(2) Other product. Luncheon meat, meat loaf, and similar products may be prepared with water not to exceed 3 percent of the weight of all other ingredients during formulation.

* * *

(b) Control

(1) Plant. Plant management shall provide adequate facilities and equipment including tables for defective container rework, accurate recording thermometers on continuous cookers, etc., and competent designated employee(s) who shall, as applicable for the process:

1. Assure that containers and lids are clean before filling and that product filling temperature is as in approved procedures.

2. Assure that canning date and product name, identified by code or other marking, are legible and properly applied.

3. Control vacuum or steam flow setting to provide proper vacuum.

4. Periodically check containers from various parts of tanks or cookers to insure proper product temperature, and to identify and correct cold spots.

5. Determine adequacy of processing and chilling methods to assure product is properly processed. Such methods should be recognized by the National Cannery Association or similar technically qualified authority.

6. Assure that processing procedures are not changed without PPID approval.

7. Identify baskets, cages, or cans with temperature color changing devices at end of closing line.

8. Periodically (at least twice daily) examine cans from each closing machine by disassembling the double seam, or by inspecting magnified cross-section of the seam in a special device to determine that closure is within can manufacturer's acceptable range.

9. Observe can handling. Randomly select and check, after can closing and processing, cans from each lot for head space, vacuum, and container's condition (dents, buckles, leakers, etc.).

10. When swelled or otherwise abnormal cans develop, (a) notify the inspector, (b) retain defective lots, (c) determine and correct cause, (d) recall defective product, and (e) request inspector's approval and verification to dispose of such product.

11. Keep records of time and temperature (cook temperature charts), and all can examination findings for inspector's review.

12. Provide a copy of the code key to the inspector's file.

4. Assure adequacy of temperature devices and verify temperature records from various parts of cooker.

5. Observe tagging of baskets with temperature color changing devices, and their removal from empty baskets.

6. Periodically check processed product containers for adequate processing, handling and storing.

7. Retain production and notify the inspector in charge when improper procedures are determined.

8. Retain noncompliance product and all lots represented by samples found defective, or showing spoilage during storage.

9. Obtain recall of all lots showing noncompliance and supervise disposition of defective containers.

10. Submit a sample of unopened cans to the microbiological laboratory for questionable lots that develop swells under normal handling.

11. Review plant records of double seam examination, cook charts from each cooker, and other records.

As applicable for all:

container cleanliness
operating equipment
and closing, and cook-
temperature.
product preparation
to confirm adequate

procedures for possible
practices leading to
product.

18.47 SHELF-STABLE, HEAT-PROCESSED PRODUCTS

These are products (meat or poultry) canned in hermetically sealed containers and cooked under pressure.

(a) Control

See Sec. 18.46(c).

(b) Incubation

Representative samples of shelf-stable, heat-processed products must be incubated.

(1) **Thermometer, temperature.** A dependable recording thermometer is required for incubation room.

Incubation temperature shall be maintained at 95° F. (plus or minus 2 degrees). If temperature falls below 93° F., the incubation time will be increased for the time the cans are held below 93° F.

Free air must circulate between containers to prevent uneven temperature. More than a rare fluctuation outside the acceptable temperature range requires facility adjustment or repair.

(2) **Sampling.** Regardless of retort size, establishment must incubate at least one can for retort load, and regardless of container size in hydrostatic cookers one can for each 1,000 containers.

(3) **Exception.** Plants wishing to use other incubation programs shall submit them to MPITS-PPID for approval.

(4) **Security.** The inspector shall keep the incubation room under security during nonoperating hours and shall release it in the morning for reviewing samples with plant personnel. The incubation room will then be available to the establishment during the day for new samples.

(5) **Daily check; record.** Designated plant employees shall check daily all containers in incubation, and shall notify the inspector when defective

containers (swellers, leakers, etc.) are observed.

They shall also maintain incubation records and keep them readily available for inspector's review. Such records should include code identification, number of cans from each lot, in-and-out dates, and lot disposition (released, retained, recycled).

(6) **Shipping.** According to the respective meat and poultry regulations, permission to ship product before sample incubation is completed can be granted by the circuit supervisor for meat products and the inspector-in-charge (IIC) for poultry products. In order to facilitate uniformity pending revision of the regulations, in the case of poultry products, the IIC should consult with the circuit supervisor before any actions are taken. In all cases, permission to ship canned product before incubation is completed can only be granted if:

(i) The plant has had a good history regarding 1) complying with the regulations; 2) incubation test results; and 3) condition-of-container examinations (i.e., absence of critical defects described in Chart 18.3).

(ii) The establishment submits written procedures for product control to the circuit supervisor or IIC, as appropriate. Such procedures must assure that shipped product will not reach the retail level of distribution before sample incubation is completed and that product can be returned immediately to the establishment should such action be necessary.

Permission to ship product before incubation ends shall be provided to the establishment in writing. A copy of both the establishment's procedures and the written approval shall be on file in the office of the IIC.

daily (but at least yearly) the plant supervisor should require the establishment to disclose location(s) where a shipped lot was located on the date incubation is completed. Immediate followup inspection is made (with compliance if necessary) to determine that the lot has not moved from the identified location(s). The inspector should be able to readily locate the lot and verify that the lot has moved from the stated location(s) should a cause be considered to rescind the establishment approval.

The IIC should be provided with a copy (keep on file) the compliance history, as determined by the IIC checks.

18.48 SHELF-STABLE, ACIDIFIED PRODUCTS

Some prepared products--sausage in vinegar, pickled pig feet, lamb tongue, etc.--may be packed in containers without heat processing after blanching and without hermetical sealing, provided (1) meat ingredients and liquid media have a pH of 4.5 or less, and (2) RD approves the procedure. When applying for approval, plant management shall submit pH range of product and pH check frequency.

Control. Most items prepared with vinegar or tomato products are easily maintained at a pH below 4.5. However, to verify the pH range, minimum checks by laboratory pH meter of approximately one for every other batch or twice in an 8-hour shift should be conducted.

The inspector shall occasionally determine whether the pH range is being maintained by making his own tests. If not, product shall be retained and brought into compliance.

18.49 CONTAINER CONDITION

(a) Plant

Establishment shall routinely conduct inspection of finished lots to assure that only acceptable containers are shipped.

(b) Formal Inspection Plans

They shall be used by the inspector for selecting samples and evaluating defects to verify the effectiveness of plant procedures.

To verify plant control, the inspector should sufficiently check whether defective containers are shipped, especially when abnormal conditions exist--truck accident, questionable returned lots, etc.

Container selection. Use table 18.9 to select number of containers from each carton.

(1) Normal (Table 18.10). Use this plan for routine check to verify plant effectiveness.

(2) Reduced (Table 18.11). Use this plan only when authorized and when a pattern of acceptable product has been established and verified.

(3) Tightened (Table 18.12). Used for reworked lots.

(c) Sample Selection

To allow each container in the lot equal opportunity of being selected, samples shall be randomly selected according to applicable plan.

(d) Defect Classification

Carefully inspect sample containers and classify all defects according to defect classification chart (18.3).

Compare classified defects with accept-reject (Ac-Re) criteria in applicable inspection plan. Accept or reject inspected lots as required.

(e) Lot Rejection; Reinspection

Rejected lots may be reworked, sorted, resubmitted for inspection, and reinspected under tightened plan. The inspector must assure that reinspection does not result in release of product that might endanger public health. Advice from higher authority should be obtained whenever such danger is suspected.

Table 18.9 - Container selection

Containers (in carton)	Number from each carton
5 or less	All
6 - 12	6
13 - 60	12
61 - 250	16
251 or more	24

Table 18.10 - Normal plan

Lot size (containers)	Plan no.	Sample size	Critical defects		Total critical and major defects	
			Ac	Re	Ac	Re
6,000 or less	N2	84	0	1	3	4
6,001 - 12,000	N3	168	1	2	5	6
12,001 - 36,000	N4	315	2	3	8	9
36,001 - over	N5	500	3	4	12	13

Table 18.11 - Reduced plan

Lot size (containers)	Plan no.	Sample size	Critical defects		Total critical and major defects	
			Ac	Re	Ac	Re
6,000 or less	R1	29	1	2	1	2
6,001 - 36,000	R2	84	1	2	3	4
36,001 - over	R3	168	1	2	5	6

Table 18.12 - Tightened plan

Lot size (containers)	Plan no.	Sample size	Critical defects		Total critical and major defects	
			Ac	Re	Ac	Re
6,000 or less	T3	168	0	1	4	5
6,001 - 12,000	T4	315	1	2	6	7
12,001 - 36,000	T5	500	2	3	9	10
36,001 - over	T6	800	3	4	13	14

Chart 18.3 - Defect classification

Type	Description	Class
Blown, hard swell	Greatly distended or ruptured due to internal gas formation	Critical
Flipper Springer	Base, top or side convex or distended (with pressure on other end or side of can)	Critical
Loose tin		
Short vacuum	Bulged ends or loose side tin	Critical
Overstuffed	Bulged ends due to overfill	Critical
Punctured	Due to mechanical action	Major
Dents	One or more, affecting seam(s) or key opening scoring	Major
Improper seam	Ends or side	Major
Buckles	One or more, affecting end seam or key opening scoring	Major
Cable cuts	One or more, exposing internal laminations of end seam	Major
Rust pits	Pitted areas of base plate	Major
Leaking	Broken or loose cap	Critical
Dirty	Smeared with product or product trapped between lid and side	Major
Other	Must be specified; missing label and the like	Major

RENDERING, REFINING

Subpart 18-I

317,318,319; P-Subpart O)

14.52 FACILITIES, EQUIPMENT

Rendered product identity (lard, rendered pork fat, tallow, poultry fat, etc., tallow, stock, etc.), rendering should provide separate equipment. This also applies to holding and refining vegetable oils.

Rendering equipment is used interchangeably, common pumps, tanks, pipelines must be properly identified. Pipelines delivering vegetable oils and animal fats for blending must end at level of blending tank contents.

14.53 MATERIALS

(a) Inspection

All raw materials should be inspected for wholesomeness before rendering.

Broken fats should be cut or broken, and examined for wholesomeness.

(b) Restricted Product (Meat)

Carcasses and parts passed for cooking may be rendered if adequate measures are taken to assure identity and security until rendered.

(c) Poultry Fat

It may be rendered by heating to a temperature slightly above 212° F. Temperature above 220° F. results in darkened color, altered odor and flavor, and poor keeping quality of rendered fat.

Poultry fat shall not be rendered if it has an incipient rancidity, an offensive odor, a grey-yellow, or other off-color conditions.

Mesenteric fat. Since undesirable odors cannot be completely removed and a practicable method of separating

fat from intestines without contamination is not available, poultry mesenteric fat shall not be used for rendering.

(d) Pork Skin

Fat from pork skin "fleshing" may be rendered for lard, provided it is wholesome. Fresh pork skins may be used in lard rendering when, as a lot, they have at least 65 percent trimmable fat (see Part 19).

(1) Hair roots. Skins with hair roots may be used for rendering or gelatin.

(2) Hair follicles. Large inverted hair follicles must be removed from pork skins or pork jowls before rendering or other processing.

(3) Jowls. Pork jowls must be sliced or deeply scored before rendering (see Subpart 18-D).

(4) Detached skin. It refers to portions of skin removed from underlying fat--skin removed from bacon, hams, shoulder cuts, fat backs, etc. Such skin cannot be used for lard.

If removal of skin portions is incidental to removal of considerable proportion of underlying fat from ham, shoulder, back, etc., preparatory to rendering of such fat, skin portions so removed should not be regarded as detached skin, and may be included with fats and rendered into lard. Ham facings are not regarded as detached skin.

(e) Skimmings

"Skimmings" include unrendered and rendered fat from rendering.

(f) Pressings (Meat)

"Pressings" include the following:

1. Fat pressed from residue of lard rendered other than by steam may be regarded as "lard," if it is promptly freed of sedimentary scrap and water. When steam rendering is used, fat

pressings shall not be rerendered for lard. Such fat may be rerendered for rendered pork fat.

2. Fat pressed from residue or rendered pork fat, and fat pressed from residue of lard rendering may be regarded as rendered pork fat if promptly freed of sedimentary scrap and water.

(g) Rendering Residues

(1) Pressed. Pressed residue from "open kettle" rendered lard and pork fat, not pressed by expeller or hydraulic press, may be rerendered for rendered pork fat. Other pressed residue from rendering lard and rendered pork fat shall not be rerendered for edible purpose.

(2) Unpressed. Unpressed residue from rendering lard and rendered pork fat, other than by steam, may be rerendered for rendered pork fat. Unpressed residue from rendering lard and rendered pork fat shall not be rerendered for lard.

Unpressed solids from steam rendering may not be used for edible product.

(h) Scrap fat

It includes fatty tissue from carcass splitting, carcass or part sawing, etc., reasonably free from muscle tissue, blood, and large blood vessels. Scrap fat does not include fatty tissues of thoracic, abdominal and pelvic cavities, or trimmable fat scraped from surfaces of above cavities.

(i) Settlings

They include "bottoms"--accumulations of scrap, water, rendered fat, etc.--from receiving, settling, and storing vats.

(j) Tank water

Edible rendered fats with tank water in first souring stage may be reprocessed if handled promptly. These fats may not be mixed with sound product.

2/2/74 (Change 2)

(k) Antioxidants

To improve stability, acceptable antioxidants may be added to rendered fat (MR-318).

(1) Settling Salt

Salt used to settle rendered fats should be free from extraneous material that indicates contamination with filth but may contain insoluble mineral matter that does not remain in the rendered fat.

18.54 CONTROL; HEAT EXCHANGERS

(a) Plant

Plants using swept surface heat exchange equipment in animal fat rendering, refining, or margarine systems shall designate an employee to draw a one-half pound sample every hour from filling and packaging lines. This sample may be filtered and examined for foreign material immediately, or all samples may be composited and examined at the end of a shift. The filters shall be saved for examination by the inspector. Plant personnel shall daily examine all magnetic traps and filters installed in the above equipment. If foreign material is present on the filters or in the magnetic traps, the inspector shall be notified immediately.

Shaft, scrapers, and barrel of swept surface heat exchangers shall be examined at least once every *-6-* months * for scoring, gouging, chipping, etc., and for presence of contaminants (metal or plastic fragments, etc.).

(b) Inspector

He shall monitor plants where above procedures apply by (1) examining the filters saved by plant employee, (2) occasionally observing plant's filtering tests, (3) taking a 1-pound sample at least twice during a visit, compositing the samples, and making a filtration test at least once a month, and (4) checking magnetic traps and line filters at least once every four visits.

the lot found contaminated with foreign material shall be retained. The establishment shall determine and correct the deficiency before resuming normal operations.

When above-listed operations qualify for initial or limited inspection, the inspector shall monitor such operations when he visits the plant.

(c) Animal Fat

Submit samples of animal fat for species determination when product mislabeling is suspected--tallow in lard or vice versa (see Part 23).

(d) Vegetable Oil

Submit samples of incoming shipment of vegetable oils for possible presence of animal fats. Sample as instructed by regional or area office. Submit a 1-pound sample of mono- and/or diglycerides when used in products.

(e) Noncompliance

A lot in which a sample is found contaminated or otherwise not in compliance shall be retained. Product shall be cleaned, recycled, or disposed of as acceptable to the circuit supervisor.

18.55 SPECIAL PRODUCTS (Meat)

(a) Partially Defatted Tissue

Partially defatted beef or pork fatty tissue and partially defatted chopped beef or pork, manufactured by low temperature rendering processes, require use of acceptable raw materials, prompt chilling, and subsequent freezing of the residue.

To insure production of sound and properly labeled products, the following safeguards must be observed:

(1) Raw materials. They must be from official plants and recent production lot, in excellent condition, and stored at room temperature of 50° F. or less. Kill floor fats

moved within the plant directly to rendering units are exempt from this temperature requirement.

(2) Meat used. A representative sample of meat trimmings to be used must contain at least 12 percent lean meat, as determined by knife-cutting separation, for product labeled "partially defatted chopped beef" or "partially defatted chopped pork." Since lean meat percent can be determined at plant level, samples should not be sent to the laboratory.

Compliance with this requirement is determined by the plant drawing a 5-pound sample unit from each of 10 different containers of raw material. The inspector designates containers to be sampled by a random selection procedure. The test shall be performed under his supervision. Tests shall be made at least twice during each shift. Each 5-pound sample unit must average at least 12 percent lean meat for the product to be classified as partially defatted chopped beef or pork. Leaner cuts of meat may not be added to lots of raw material which fail these requirements to bring such lots into compliance.

(3) Chilling. Partially defatted product shall leave the refrigeration cycle of the process at 40° F. or less.

(4) Freezing. The partially defatted product shall be rapidly frozen to 30° F. within a 6-hour period unless immediately used in product.

(5) Laboratory samples. Frequent samples shall be sent to the Microbiology Laboratory to evaluate plant's inspection controls. Samples must be frozen and adequately packed to prevent defrosting in transit.

(b) Oleomargarine

MPI maintains inspection over plants manufacturing oleomargarine with animal fats for interstate commerce. Such inspection deals with sanitation of the plant, wholesomeness of all raw materials, and accuracy of labeling. FDA is responsible for inspection of oleomargarine prepared without animal fats. However, MPI will require correction of insanitary conditions in parts of official plants used for making vegetable margarine.

MPI personnel are required to cooperate with FDA to assure adequate sanitation coverage is maintained over plants manufacturing oleomargarine with and without animal fats.

(c) Skins For Popping

Pork skins will be checked for hair roots before or after popping. Popped product must be free from hair roots.

(1) Definitions

(i) Sample block. Twenty-five square inches of skin; one or more pieces of skin may make up a sample block. Check only 10 sample units in each sample block.

(ii) Sample unit. One square inch of skin in a sample block.

(iii) Sample size. Number of sample blocks required according to the lot weight (fresh). *

(iv) Sampling overlay. Transparent plastic sheet containing a 5"x5" area lined into 25 one-inch squares. Ten squares are clear and 15 are shaded. See example in Figure 18.4. The 10 clear squares identify the sample units to be checked. Several sampling overlays with varied shaded out 1-inch squares should be available for inspector's use. *

(v) Defective unit. A sample unit with one or more hair roots. *

(vi) Acceptance number (Ac). The maximum number of defective units in the sample that will permit the acceptance of the lot. *

(vii) Rejection number (Re). Minimum number of defective units in a sampling plan requiring lot rejection. *

(2) Sampling; inspection procedure. The inspector shall: *

- a. Determine the lot size (using fresh weight) and identify the required sample size (number of sample blocks) from Table 18.13. *

Table 18.13 Pork Skin Sampling

Lot Size (Pounds)	Sample size (blocks)	Sample units	Sampling Plans			
			Normal		Tightened	
			Ac	Re	Ac	Re
3,000 - under	6	60	10	11	7	8
3,001 - 12,000	12	120	17	18	12	13
12,001 - 18,000	20	200	27	28	19	20
18,001 - over	32	320	41	42	28	29

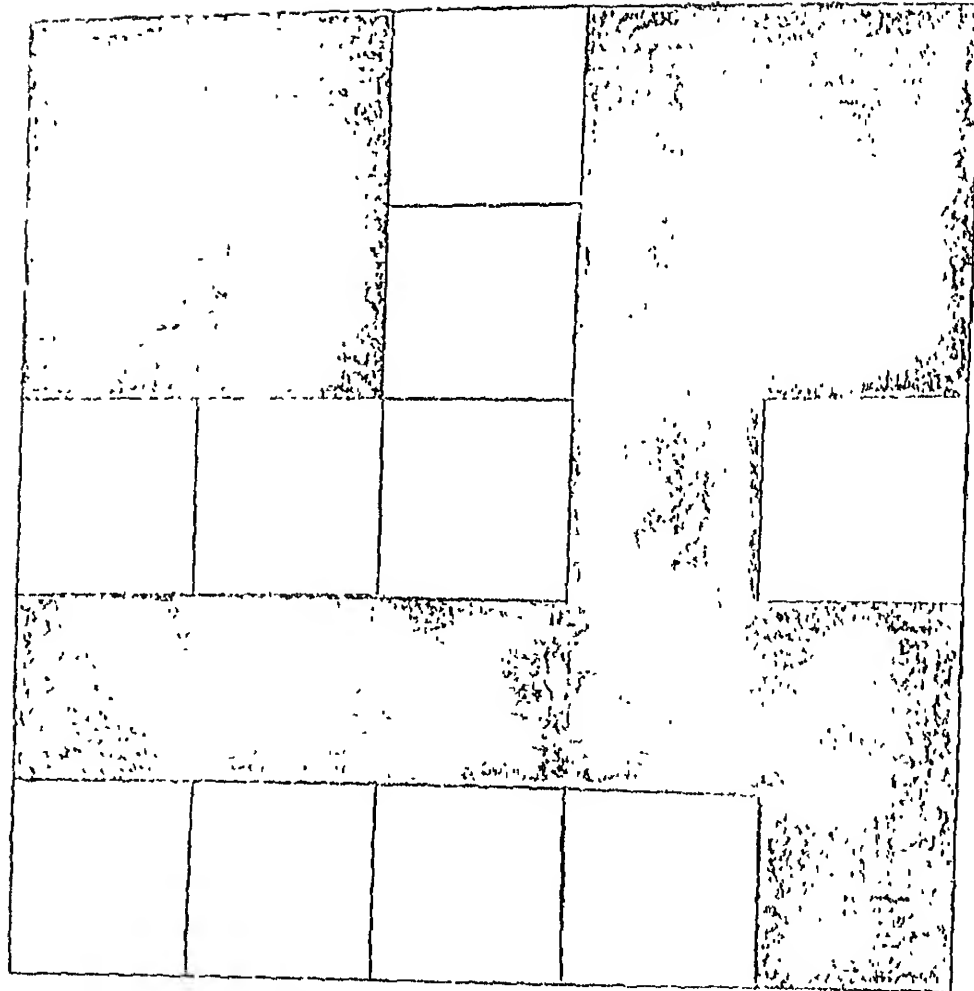


Figure 18.4 - Sampling Overlay

- * b. For each lot, randomly select one carton of fresh skins for each required sample block, or, randomly select enough popped skins (prior to packaging) throughout the lot for each required sample block.
- * c. Randomly select and use one sampling overlay for each lot. Determine and record number of defective units identified in the 10 clear 1 inch squares of all sample blocks in the lot.
- * If skins are frozen, remove frost from sample blocks before checking.
- * d. Total the number of defective units; compare the total number with the Ac - Re criteria in Table 18.13; accept or reject the lot accordingly.
- (3) Reinspection. A rejected lot may be reinspected after reconditioning using the tightened criteria.

DEHYDRATION (POULTRY)

Subpart 18-J

Dried poultry products may be placed in cans. To prevent oxidation of remaining fat, oxygen is replaced with nitrogen or other inert gas.

18.58 METHODS; MATERIALS

Dehydration may be accomplished by (1) drum drying on heated rollers, (2) spray drying, (3) low temperature vacuum, or (4) heat drying in ovens. Poultry meat may also be dehydrated by heating in edible oil at 212° F.; however, product will contain some oil.

(a) Oven Heating

Cooked poultry meat is ground and spread in thin layers on pans or trays. A vacuum applied during oven drying permits water removal at lower temperatures.

(b) Freeze Drying

Frozen pieces of meat are submitted to heat under high vacuum. The meat's ice-formed water evaporates directly from solid to vapor state without product thawing. Product does not shrink as in other dehydrating systems.

(c) Drum-Spray Drying

This method is similar to milk drying. A slurry may be dried by spraying directly into heated air.

(d) Antioxidants

In poultry meat slurries, some fat is normally present. Therefore, sufficient antioxidant may be added during dehydration to produce a product with acceptable keeping quality. The inspector must assure that only approved antioxidants are used, and that their total weight does not exceed 0.02 percent of the fat (weight) present in the product to be dehydrated. Fat content must be accurately determined to properly control antioxidant concentration in finished product.

NET WEIGHT

Subpart 18-K

(Regs: M-317; P-Subpart N)

Net weights must be accurate. Systematic plant controls must be maintained over container contents to comply with regulations.

18.61 NET WEIGHT

(a) Definition

Net weight includes all nutritious contents suitable for food. It is the gross weight minus the tare weight.

When meat or poultry product is packed in nonnutritious medium--water, brine, agar--the net weight is the drained weight.

(b) Determination

Net weight may be determined by approved quality control system or lot inspection.

(1) Approved quality control.

(i) Inspector. When a plant quality control system, approved by STS-SDS is in effect (Subpart 18-A), the inspector shall:

1. Assure that approved procedure is on file in the Government office. Such procedure includes sampling rates, limits, and actions to be taken when limits are exceeded.

2. Observe plant sampling, weighing, and recording of random intervals at least five times a week.

charts and keep a log of results in the Government office. Sample one subgroup at least once a week. Weigh and record as required at the plant. Use alternate methods and check for accuracy. Keep a log of results on file in the Government office.

Assure that (1) he is notified when specified limits are exceeded, (2) plant personnel take corrective action, and (3) sampling and recording are accurate.

Check a lot by the lot inspection procedure at least once a week, and keep record.

Adhere to general requirements in report 18-A.

(11) Plant. Plant's quality control personnel shall:

1. Maintain records of net weights taken during filling operations. Each individual weight will be recorded as well as the time, filling line, product, code and any other necessary identifying information. Also the target weight, required weight, and limits for individual and subgroup averages must be shown. Displaying weights graphically on control charts has been shown to be effective in clearly reflecting trends and predicting eventual lot acceptability.

2. Check net weights in groups of 5 or 10 containers at a time. Record all weights on the chart even if product is reworked immediately. Check at least one group an hour.

3. Total the weights in each group and determine the average (\bar{X}) and the range (R).

4. Plot the lowest and the average value as well as the range. On the chart indicate action taken whenever underweights exceed limits in Table 18.14.

5. Take the following action when such limits are exceeded:

a. Retain all product produced after last acceptable group weighing. Try to ascertain the cause when an individual weight falls below the

"Lower Limit for Individual Weights (LRL)." If an assignable cause is found, correct the fault immediately. If no cause is found, institute increased sampling to determine if the problem is recurring. Retained product must be reweighed and all packages below label weight removed from the retained product prior to release or retained product must be reweighed and remarked or used as rework.

b. If a group average falls below the "Lower Limit for subgroup Averages (LRL \bar{X})," take the same action as outlined in "a" for low individual weights.

c. If a series of group averages below the label weight equals or exceeds the run criteria listed in Table 18.15, retain all production back to the time of the last group weighed before the run. Take the same action on retained product as outlined in "a" for low individual weights.

d. Retain the entire shift's production if the average of all subgroups weighed during the shift is less than the stated label weight. (Exclude from this average all subgroups representing portions of production rejected during the shift for failure to meet the run criteria.)

e. Notify production personnel whenever the range equals or exceeds the "Range Limits (R)₁₀ or (R)₅". They should search for assignable causes (such as malfunctioning filling machine) and make necessary adjustments.

6. Contact TS-PPIS with requests for permission to use limits more liberal than those in Table 18.14.

(2) Lot Inspection. For all import inspections and when an approved plant

Table 18.14 - Minimum and maximum limits ^{1/} for QC inspection

Standard deviation			.08 oz.	.16 oz.	.33 oz.	.50 oz.
\bar{X} - Marked or required net weight	Group A		Group 1	Group 2	Group 3	Group 4
Lower limit for individual weights (LRL)	\bar{X} Minus	10% of \bar{X}	7.1 gm. .25 oz. 8/32 oz. 4/16 oz. 2/10 oz. 2/8 oz. 1/4 oz.	14.2 gm. .50 oz. 16/32 oz. 8/16 oz. 5/10 oz. 4/8 oz. 2/4 oz.	28.3 gm. 1 oz. 1 oz. 1 oz. 1 oz. 1 oz. 1 oz.	42.5 gm. 1.50 oz. 1 16/32 oz. 1 8/16 oz. 1 5/10 oz. 1 4/8 oz. 1 2/4 oz.
Lower limit for subgroup averages of 10 weights (LRL-) \bar{X} 10	\bar{X} Minus	3% of \bar{X}	2.2 gm. 0.08 oz. 2/32 oz. 1/16 oz. (2/) (2/) (2/)	4.5 gm. .16 oz. 5/32 oz. 2/16 oz. 1/10 oz. 1/8 oz. (2/)	9.1 gm. .32 oz. 10/32 oz. 5/16 oz. 3/10 oz. 2/8 oz. 1/4 oz.	13.6 gm. .48 oz. 15/32 oz. 7/16 oz. 4/10 oz. 3/8 oz. 1/4 oz.
Lower limit for subgroup averages of 5 weights (LRL-) \bar{X} 5	\bar{X} Minus	4% of \bar{X}	3.5 gm. .12 oz. 4/32 oz. 2/16 oz. 1/10 oz. 1/8 oz. (2/)	7.0 gm. .25 oz. 8/32 oz. 4/16 oz. 2/10 oz. 2/8 oz. 1/4 oz.	14.1 gm. .50 oz. 16/32 oz. 8/16 oz. 5/10 oz. 4/8 oz. 2/4 oz.	21.2 gm. .75 oz. 24/32 oz. 12/16 oz. 7/10 oz. 6/8 oz. 3/4 oz.
Limit for ranges of subgroups of 10 weights (R) ₁₀		15% of \bar{X}	10.8 gm. .38 oz. 12/32 oz. 6/16 oz. 3/10 oz. 3/8 oz. 1/4 oz.	21.5 gm. .76 oz. 24/32 oz. 12/16 oz. 7/10 oz. 6/8 oz. 3/4 oz.	43.4 gm. 1.53 oz. 1 17/32 oz. 1 8/16 oz. 1 5/10 oz. 1 4/8 oz. 1 2/4 oz.	64.9 gm. 2.29 oz. 2 9/32 oz. 2 4/16 oz. 2 2/10 oz. 2 2/8 oz. 2 1/4 oz.
Limit for ranges of subgroups of 5 weights (R) ₅		12% of \bar{X}	9.1 gm. .32 oz. 10/32 oz. 5/16 oz. 3/10 oz. 2/8 oz. 1/4 oz.	18.4 gm. .65 oz. 20/32 oz. 10/16 oz. 6/10 oz. 5/8 oz. 2/4 oz.	36.8 gm. 1.30 oz. 1 9/32 oz. 1 4/16 oz. 1 3/10 oz. 1 2/8 oz. 1 1/4 oz.	55.0 gm. 1.94 oz. 1 30/32 oz. 1 15/16 oz. 1 9/10 oz. 1 7/8 oz. 1 3/4 oz.

^{1/} Use limits recorded in terms of scale calibrations used. Ex: If scale is in 1/16ths, use limits in 1/16ths; if in grams use gram limits. Do not convert.

^{2/} Minimum limit is the marked or required net weight when sensitivity of scales used does not permit calibrations as precise as those recorded above.

Table 18.15 - Run criteria ^{1/}

Consecutive subgroup averages						
Number of consecutive subgroup averages plotted on control chart	7	11	14	17	20	23
Number of subgroup averages below stated total weight is excessive	7	10	12	14	16	18

1. Action should be taken when four consecutive low subgroup averages occur. Frequent runs over four low averages indicate an ineffective control system. It would be cause for approval withdrawal and return to lot inspection.

quality control system does not exist, the inspector shall determine net content compliance by the following procedure.

1. Check a total of 10 lots each week. This should be increased if frequency of underweight lots warrants, or should be decreased if volume of production is low. Emphasis should be placed on those items which are frequently borderline or low in weight.

Groups. For purpose of assigning individual and average weight limits, all products are placed into one of two groups as shown in Table 18.16. Homogeneous products are those which

are of uniform consistency throughout. Baby food is homogeneous; beef stew is not. "Fluid" at time of filling refers to liquids and solid products (like shortening) which are heated and filled as a liquid.

Scales. Any accurate scale may be used, although tolerances are generally more liberal when scales with greater sensitivity are used. Scales should be set on a solid foundation and periodically checked with weights of known accuracy. In reading a scale, should the pointer fall between two subdivisions, the weight should always be read as the lower calibration. Never round off to the higher calibration.

2. Determine the average tare weight. The total weight of all containers weighed divided by the number weighed is the average tare weight.

a. Sources of Containers.

The individual empty containers which were or will be weighed to obtain individual gross weights.

Any other samples of empty containers from the lot before or after filling.

Different lots of containers of the same type, style, size and manufacture (provided past experience shows less than one-eighth ounce variation in average tare weights between lots).

b. Determination of Tare Weight.

If prior to filling empty containers and lids from the same source are

Table 18.16 - Groups

Group	Definitions	
	Homogeneous fluid when filled (Ounces)	All other products (Ounces)
1	Less than 3	Less than 3
2	3 to 16	
3	Over 16	3 to 7
4		Over 7 to 48
5		Over 48 to 160
6		Over 160

Table 18.17 - Tare weights

Range of first 3 container tare weights (ounces)	Total number of container 1/ tare weights required (include first 3)
0 to 1/8	3
3/16	6
1/4	9
5/16	12
3/8 or more	15

1/ If unfilled containers are not available and total number needed for tare weights exceeds the number opened for product examination, use only number opened. In this case, maintain a history of succeeding lots of same cans until a proper average tare is obtained (at least 15 samples).

available, weigh a minimum of 15 containers. Use the average weight of the 15 as the tare weight.

When unfilled containers are not available, empty, wash, dry and weigh three containers from the lot. Use the same scale as that used for net weight determination or one of greater sensitivity.

Determine the range of container weights. The total number of empty containers weighed to establish the average tare weight for a lot will be based on the difference between the highest and lowest of these first three weights as indicated in Table 18.17.

3. Select samples from the completed lot or if the size of the lot to be packed can be predicted, samples may be randomly selected during the packing operation. Under no circumstances are weights to be determined until after the lot is completed. Check weights are strictly plant's function during production.

4. Determine the individual net weights on an initial sample of 10 clean, dried, filled containers randomly selected from the lot. Record them on Form MP 486. File this form in the inspector's office for one year.

5. Calculate the average net weight by adding the 10 individual weights

and dividing by 10. This average should always be expressed in the same denomination as the scale calibration. If the scale is calibrated in 16ths of an ounce, the average weight should be expressed in ounces rounded off to the nearest 16th. (For example, if we had 10 weights which averaged $8 \frac{.67}{16}$

oz., we would round it off to 1/16 and express the average for the lot as 8 1/16 oz.).

6. For Groups A and 1 through 4, determine:

a. The two lowest individual net weights, and

b. The plus or minus difference between the declared label weight and the sample average.

7. Select the proper group for underweight limits from Table 18.16.

8. Use the limits prescribed in Table 18.18 for the proper group. Select those that are listed in the same calibration as the scale being used.

9. Accept the lot without further sampling if

a. Neither of the 2 lowest individual weights is less than the appropriate "Lower Limit for Individual Weights (L)," in Table 18.18.

Table 18.16 - Minimum and maximum limits $\frac{1}{16}$ for lot inspection

Group	Group	Group	Group	Group
A	1	2	J	4
10%	7.1 gm. 0.25 oz. 8/32 oz. 4/16 oz. 2/10 oz. 2/8 oz. 1/4 oz.	14.2 gm. .50 oz. 16/32 oz. 8/16 oz. 5/10 oz. 4/8 oz. 2/4 oz.	28.3 gm. 1 oz. 1 oz. 1 oz. 1 oz. 1 oz. 1 oz.	42.5 gm. 1.50 oz. 1 16/32 oz. 1 8/16 oz. 1 5/10 oz. 1 4/8 oz. 1 2/4 oz.
3%	2.2 gm. .08 oz. 2/32 oz. 1/16 oz. (2/) (2/) (2/)	4.5 gm. .16 oz. 5/32 oz. 2/16 oz. 1/10 oz. 1/8 oz. (2/)	9.1 gm. .32 oz. 10/32 oz. 5/16 oz. 3/10 oz. 2/8 oz. 1/4 oz.	13.6 gm. .48 oz. 15/32 oz. 1/16 oz. 4/10 oz. 3/8 oz. 1/4 oz.
3%	2.2 gm. .08 oz. 3/32 oz. 2/16 oz. 1/10 oz. 1/8 oz. 1/4 oz.	4.5 gm. .16 oz. 6/32 oz. 3/16 oz. 2/10 oz. 2/8 oz. 1/4 oz.	9.1 gm. 0.32 oz. 11/32 oz. 6/16 oz. 4/10 oz. 3/8 oz. 2/4 oz.	13.6 gm. .48 oz. 16/32 oz. 8/16 oz. 5/10 oz. 4/8 oz. 2/4 oz.
1%	1.1 gm. 0.04 oz. 1/32 oz. (2/) (2/) (2/) (2/)	2.3 gm. 0.09 oz. 2/32 oz. 1/16 oz. (2/) (2/) (2/)	4.5 gm. 0.16 oz. 5/32 oz. 2/16 oz. 1/10 oz. 1/8 oz. (2/)	7.0 gm. .25 oz. 8/32 oz. 4/16 oz. 2/10 oz. 2/8 oz. 1/4 oz.

$\frac{1}{16}$ The limits recorded in terms of scale calibrations used. Ex.: If scale is 1/16ths, use limits in 1/16ths; if in grams, use gram limits. Do not convert.

$\frac{2}{16}$ Min. - Limit is the marked or required net weight when sensitivity of scale does not permit calibrations as precise as those recorded above.

b. The sample average equals or exceeds the appropriate "High Value for Averages (A_2)," Table 18.18.

10. Retain the lot without further sampling if

a. The 2 lowest weights are both less than the appropriate "Lower Limit for Individual Weights (L)," or

b. The sample average is less than the appropriate "Lower Limit for Averages (A_1)," Table 18.18.

11. Weigh an additional 30 filled containers randomly selected from the lot if:

a. One of the 2 lowest of the first 10 weights is less than the appropriate "Lower limit for the Individual Weights (L)," or

b. The sample average of the first 10 weights is less than "High Value for Averages (A_2)," but not less than the "Lower Limit for Averages (A_1)."

Table 18.19 - Basic average ranges for groups A and 1 thru 4

Group A (Ounces)	Group 1 (Ounces)	Group 2 (Ounces)	Group 3 (Ounces)	Group 4 (Ounces)
Less than .15	.15-.25	Over .25-.50	Over .50-1.0	Over 1.0-1.5

12. If an extra 30 weights are needed, calculate the average net weight by dividing the total of all 40 weights by 40. Then note:

a. The two lowest of the 40 individual net weights, and

b. The plus or minus difference between the sample average and the label weight.

c. Accept lot if (1) not more than 1 of 2 lowest of the 40 weights is less than the appropriate "Lower Limit for Individual Weights (L)," and (2) the average of the 40 weights equals or exceeds the label weight.

d. Retain the lot if (1) both of two lowest of the 40 weights is less than the appropriate "Lower Limit for Individual Weights (L)," or (2) the average of the 40 weights is less than the label weight. If the average underweight does not exceed the appropriate Limit for Averages of 40 in table 18.18, an additional 40 weights may be taken, if requested, to verify the results. All 80 weights should then be averaged and the criteria for sample of 40 applied. Accept the lot only if average equals full label weight and not more than one sample is over than (L).

e. If continued sampling of a particular product in an establishment results in frequent samplings of additional 30 containers, check to see if the ranges of the first 10 weights have been generally within the "Basic Average Range" for a lower group in table 18.19. If so, limits for this lower group may then be used.

13. For all products in Group 5 (either catch weighed or in preprinted packages), weigh 10 sample units and accept the lot, if

a. Acceptable variations between actual weights and labeled weights.

(1) For scales calibrated in 1/4 pound graduations or more no label net weight exceeds the actual weight by more than one scale graduation. E.g. scale marked in 1/4 pounds. Acceptable - marked weight 15 1/4 pounds, actual weight 15 pounds. Unacceptable - marked weight 15 1/4 pounds, actual weight 14 3/4 pounds, or (2) for scales calibrated in less than 1/4 pound graduations no label net weight exceeds the actual weight by more than two ounces. E.g. scale marked in 1/2 ounce. Acceptable - marked weight 15 pounds 3 ounces, actual weight 15 pounds 1 ounce. Unacceptable - marked weight 15 pounds 3 ounces, actual weight 15 pounds 3/4 ounce, and

b. The inspector must read and record net weights as outlined in paragraph (b) (2) under scales. The total net weight of the 10 sample units equals or exceeds the total marked weight of the 10 sample units.

c. Product not meeting the above criteria is rejected. If domestic, it may be reweighed and remarked.

VIGNETTE, DECLARED COUNT

Subpart 18-L

(Refs: M-317; P-Subpart N)

frozen dinners), sampling may be done with routine plant surveillance. Sample size and acceptance criteria are as indicated above. Sampling rate may exceed above rate.

18.63 PRODUCT APPEARANCE AND COMPOSITION

When a label vignette shows several slices or one or more exposed surfaces (e.g., canned hams, turkey rolls, dinners, pies, etc.), the product shall be of comparable appearance and composition.

(a) Definitions

(1) Lot. A shift's production of an item with a specific label showing certain quality characteristics.

(2) Deviant. Sample unit (product from one container) without a slice or exposed surface of comparable quality or appearance with the vignette.

(b) Lot Sampling

Sample 10 percent of the lots, but not more than five lots a week. Randomly select five containers from each (sampled) lot and inspect product by halving or slicing if necessary. When samples are found acceptable for 4 consecutive weeks, sampling will be reduced to one lot a week. If a lot is found in violation, the inspector will return to initial rate.

A lot is acceptable if deviants are not in the five-sample units. The lot is in violation if two or more of the five-sample units are deviants. If one of the five-sample units is a deviant, examine five more randomly selected containers, and accept the lot if none of these is a deviant. Reject the lot if one or more additional sample units are deviants.

When the inspector can verify compliance with label vignette without destructive sampling (e.g., certain

18.64 DECLARED COUNT

When a label shows count of product units (meat or poultry) in the container, either by actual count, range, minimum count, or by group of units, lot compliance shall be confirmed.

(a) Actual Count

When actual count is declared (e.g., "10 meatballs," "approximately 8 drumsticks," etc.):

1. Randomly select samples according to Table 18.20 and determine minimum and maximum limits for any sample container according to Table 18.21. For example, the label states 11 units. This count falls into the 10-15 range so the minimum acceptable count is the declared count, 11 units, and the maximum acceptable count is 13 (the declared count plus 2 units). A deviant is any container with less than 11 or more than 13 units, unless excess units are proportional (as defined in the next paragraph) to stated net weight or required meat weight. Each container in the sample may contain 13 units.

2. Determine compliance by comparing number of sample containers exceeding limits in Table 18.21 with number permitted in Table 18.20. In this example, if 13 samples were taken, the lot would fail if any container had less than 11 units or more than two containers had over 13 units, unless the excess units were proportional.

Counts should be proportional to stated net weight or required meat weight. The extra units must increase the meat weight or net weight by at least 90 percent of the weight of the extra units times the average weight of a unit. For example, "four meatballs" are declared on a label. The container requires a minimum of 2 ounces of meatballs. Maximum count

* allowable from Table 18.21 is five.
 If six meatballs were found and they weighed 2.9 ounces or more, the container would not be considered a deviant. If the weight of the meatballs was less than 2.9 ounces, it would be considered a deviant. The calculation for determining compliance in the above examples is:

a. Four meatballs are required to weigh 2 ounces so each meatball is approximately 0.5 ounces.

b. The container contained six meatballs or two more than the declared count.

c. The increase in the meat weight must be at least 90 percent of the extra units so: 2 ounces (required meat) + $.90 \times 2$ (the number of extra meatballs) $\times 0.5$ ounces (the average weight of a meatball) = 2.9 ounces.

If seven meatballs had been found, they would have to weigh at least 3.35 ounces for the container to be acceptable.

(b) Exact Count

When vignette shows an exact number of units, follow the procedure described under "actual count."

(c) Minimum Count

When a minimum count is declared on the label, a deviant is any count less than the count on the label or if the average weight of the extra units in excess of the minimum count in the container are not proportional. For example, a minimum count of 10 units and a net weight of 5 ounces is declared on the label. The plant targets at 12 units in order to meet the minimum count. Table 18.21 shows the declared count plus two is acceptable. If 13 units are found in a container, the same procedure as in "a" above applies. That is, 5 ounces + $.90 \times 3 \times .5$ ounces = 6.35 ounces which is the minimum required net weight to be considered acceptable.

(d) Range

When declared count on label is given as a range (65 to 70 drumsticks):

1. Select samples according to Table 18.20.

2. The minimum and maximum counts are the extremes of the declared range. Any container with less than the minimum or more than the maximum count is a deviant unless maximum count is proportional.

3. Accept or reject according to criteria in Table 18.20.

(e) Group of Units

When the label shows a group of units, (1) select samples according to Table 18.20, (2) count the units easily identified in the vignette, (3) count the units in each sample, and (4) calculate the average count per container. A deviant is any container with a count less than those easily identifiable on the vignette (this count may also fail the meat ingredient or net weight requirement), or the weight not being proportional. For example, meatballs in sauce, the vignette has four easily identifiable meatballs, and the net weight is 10 ounces. This requires the container to have 5 ounces of meatballs. Six cans are opened and the average of the six is 10 meatballs so the average weight of each meatball is 0.5 ounces. A deviant is a can with less than four meatballs (check if meat ingredient requirement is met) or a can with more than 12 meatballs, unless they are proportional as defined in "a" above. If the average of six containers was nine meatballs, then each meatball would be 5 ounces $\div 9$ meatballs = $5/9$ or .56 ounces. In this case, a deviant is still a can with three meatballs, or any can that contains more than 10 meatballs with no proportional increase in the weight of the meatballs.

Part 18

Table 18.20 - Declared count; lot size

Lot size (containers)		Sample size	Acceptable no. of containers	
			Below minimum limits (AQL 2.5)	Above maximum limits (AQL 6.5)
50 ounces or less	over 50 ounces			
2,400 or less	1,200 or less	3	0	.0
2,401 - 12,000	1,201 - 7,200	6	0	1
12,001 - 24,000	7,201 - 15,000	13	0	2
24,001 - 48,000	15,001 - 24,000	21	1	3
48,001 - 72,000	24,001 - 36,000	29	2	4
72,001 - 108,000	36,001 - 60,000	38	2	5
108,001 - 168,000	60,001 - 84,000	48	3	6
168,001 - 240,000	84,001 - 120,000	60	3	7
Over 240,000	Over 120,000	72	4	8

Table 18.21 - Range of declared count

Single count		
Declared or illustrated count	Acceptable count in container	
	Minimum <u>1</u> /	Maximum <u>1</u> /
2-9	Declared count	Declared count plus 1
10-15	Declared count	Declared count plus 2
16-21	Declared count	Declared count plus 3
22-27	Declared count minus 1	Declared count plus 3
28-33	Declared count minus 2	Declared count plus 3
34-40	Declared count minus 2	Declared count plus 4
41-47	Declared count minus 3	Declared count plus 4
48-53	Declared count minus 3	Declared count plus 5
54-60	Declared count minus 4	Declared count plus 5
61-67	Declared count minus 4	Declared count plus 6
68-74	Declared count minus 5	Declared count plus 6
75-80	Declared count minus 5	Declared count plus 7
Over 80	Declared count minus 6	Declared count plus 7

1/ Each container in the sample may contain this number of units.

FREEZING

Subpart 18-M

(Regs: M-318, P-Subpart I)

18.67 METHODS

The following methods are used to freeze meat or poultry products:

1. Blast freezing with high velocity air at about 20-40° F. below zero.
2. Contact-plate freezing for packages of uniform dimensions. Product is placed between metal plates reaching temperatures as low as 50° F. below zero.
3. Immersion freezing where product passes through a super chilled brine or other liquid.
4. Belt freezing which is usually continuous blast freezing on a moving belt. Carbon dioxide chambers are also employed as continuous freezers.
5. Holding freezers wherein product is held from 0 to 20° F. below zero. Air circulation is important in this type of freezing.

18.68 INSPECTION

The inspector shall sufficiently check and monitor temperature charts and devices to determine regulation compliance.

18.69 RAW STUFFED POULTRY

Since raw poultry stuffing provides an excellent medium for bacterial growth, it may create special problems. Since bulk is added to product, freezing time is lengthened. To minimize bacterial growth, consider the following sanitary procedures:

1. Stuffing bread shall not be damaged or contaminated, and shall be delivered and held in sanitary containers. Fresh or day old bread is acceptable.
2. Hand or mechanical stuffing equipment is satisfactory. Carcass

stuffing shall be done as rapidly as possible to prevent bacterial growth.

3. After preparation, stuffing should be chilled to approximately 35° F. before use, and should be used within a short time.

4. Stuffing operations should be done at room temperature below 70° F while birds are kept chilled.

5. Stuffed carcasses should be put into freezer immediately after stuffing and bagging, and should be frozen within 24 hours.

18.70 OFF-PREMISE FREEZING

(a) Meat

Meat, meat byproducts, and processed meat products labeled, "frozen" shall be handled for freezing as follows:

1. Meat cuts--hams, bellies, loins, etc.--boneless beef, pork trimmings, and meat byproducts in containers may be shipped refrigerated to an outside facility for freezing.

2. Processed meat products in institutional containers or consumer size packages; i.e., dinners, pot pies, fresh or cooked patties, pizza, breaded products, may be shipped refrigerated to a cold storage warehouse which has been approved under Section 350.3(2) of the regulations for freezing meat products. (Section 350.7 of the regulations explains the fees and charges for these reimbursable services.) *

a. Application for Approval In order to assure that processed meat products are handled and stored under wholesome conditions, the establishment shall submit a set of written procedures through the inspector-in-charge for approval by the regional director. The procedures shall contain information to assure that the products meet the same requirements as for products frozen at official plants. *

ability
ing establishment
shall notify the
is to be shipped to
freezer.
be shipped in a
vehicle.
be no more than
of shipment. The
fluctuate 5° F.
but may not exceed
of arrival at the

use freezer
freezing plant
for identifying
product by number and
product into the
mediately after its

employees shall
records and make
to the IIC upon

arrival date and

temperature just
ing freezer.

log of freezer
while product is in

and date product is

freezing establishment
the IIC prior to the
the freezer plant so
for an optional
be made.

inspection. The Circuit
shall assign an inspector
freezer locations as often
necessary to assure that
are properly handled.
the amount of product
upon conditions and
to the discretion of the
supervisor. Product found
improperly frozen, or
freezer temperatures shall be
the Area Supervisor.

1. Meat and processed meat products prepared for export may be shipped refrigerated to an outside facility for freezing under the Certification Service (MR-350).

2. Meat and meat products may move unfrozen from the labeling plant under the jurisdiction of another Government Agency.

(b) Poultry

(1) Approval; application RP grants permission to freeze product off-premises.

Plant management shall submit a completed Form MP 526 to the regional office through the area supervisor.

When approved, this form authorizes MPI employees to enter and inspect freezing facilities.

A new form shall be submitted when a change of ownership occurs.

(2) Freezing Requirements. They are the same as for product frozen at official plants. Approval is granted provided the applicant agrees to the following conditions: Before shipping, all poultry shall be chilled to 40° F. or less, as required by regulations, and shall be shipped in a sanitary covered vehicle to prevent product contamination.

Exception! Temperature of poultry to be shipped to a freezer in packaged form may rise to 55° F., provided total time elapsed between packaging and placement in freezer does not exceed 2 hours. If such time is more than 2 hours, poultry must be held under conditions that will lower and maintain the temperature at 40° F. or less (refrigerated truck, etc.) until placed into freezer.

(3) Responsibility.

(i) Plant. Management shall notify the inspector when product is to be shipped to an off-premises freezer.

(ii) Freezer. Designated employees of off-premise freezers shall keep a log or record including time product arrived, time it entered the freezer, product temperature when placed into the freezer, and after 72 hours therein, etc. Such history aids in determining inspection frequency.

(4) Inspection. The area supervisor shall assign an inspector to visit freezing locations as often as necessary to assure that products are properly handled.

Inspection will be on an intermittent spot-check basis. Amount of product to examine for adequate freezing is at the inspector's discretion.

Size, sample, and frequency of inspection vary depending upon handling practices, promptness of movement into freezer, and freezing facilities.

(i) Unacceptable freezing.

Product found unwholesome, improperly frozen, or held at improper temperatures shall be reported to the area supervisor. Product which is grade labeled and does not meet the requirements of 7 CFR 70.353(h) or 70.354(h) shall be reported to the appropriate Federal-State supervisor.

APPROVED WAREHOUSE (MEAT)

Subpart 18-N

(Regs. M-307, 308, 318)

Control over handling federally inspected product at approved warehouses assures product identification and wholesomeness.

18.73 APPROVAL; CLASSIFICATION

Upon approval, a warehouse may handle unpackaged primal or wholesale cuts, animal byproducts for certified animal food, fresh pork for trichinae treatment, and beef passed for refrigeration.

(a) Application

To obtain approval, warehouse owners or operators must send a completed MP Form 225 to RD.

(b) Survey

The area supervisor or his designee shall survey the warehouse and report findings and recommendations to the regional office.

18.74 FACILITIES, EQUIPMENT, SANITATION

(a) General

Warehouse facilities, equipment, and sanitation--outside premises (drive-ways, parking areas, loading and unloading docks), floors, walls, ceilings, water supply, lighting, ventilation, equipment, dressing and rest rooms, drinking fountains, handwashing facilities, lockers, waste disposal, personal hygiene, insect and rodent control, etc.--shall comply with Subparts 7-A, 8-B, 8-C, 8-D, 8-E, and 8-G in areas where meat products are handled or stored.

(1) Refrigeration.

(i) Thermometers. Each room must have a thermometer or other easy-to-

read temperature measuring device. Thermometer sensing element and other temperature measuring devices must provide representative temperature readings throughout storage areas. Indicating thermometers should be read and recorded by warehouse employee at least daily. Each temperature chart shall be dated and show the time of each temperature reading.

(ii) Frost, defrosting.

Frost (snow) on coils shall not become excessive. When overhead coils in storage rooms are defrosted, frozen foods shall be protected from moisture contamination.

(iii) Certified pork.

Warehouses intending to freeze pork to be certified as trichinae free must provide separate areas equipped with acceptable temperature recording devices and facilities to allow for adequate MPI security of product and recording devices. For further requirements see § 318.10(c)(2) and § 325.7(b) of the Federal meat inspection regulations.

(iv) Beef passed for refrigeration.

Cysticercosis beef passed for refrigeration may be shipped under official seal to approved warehouses for treatment. The warehouses must provide separate areas equipped with acceptable temperature recording devices and facilities to allow for adequate MPI security of product and recording devices. For further requirements see § 311.23(a)(2) and § 325.7(b) of the Federal meat inspection regulations.

(2) Sanitation Responsibility.

Management is responsible for warehouse sanitary maintenance, and for designating a competent employee with responsibilities over cleanup operations to assure all areas are kept clean.

(b) Additional Requirements

An approved warehouse must also

have:

1. At least one designated room for storage of unwrapped product. If necessary, such room may also be used for packaged product.

2. A properly drained room or area, with cold and hot water for cleaning trucks, racks, etc.

3. A designated area--with water, acceptable table and adequate lighting--for product reconditioning. Handwashing facilities are unacceptable for washing product (see Subpart 17-B).

Ice glazing. With advance notice to the area supervisor, ice glazing of frozen meat products may be conducted in an approved warehouse. It is usually done by dripping or spraying frozen meat cuts with water to obtain a surface ice coating. Soiled or otherwise contaminated product shall not be ice glazed (see Subpart 18-D).

8.75 SEAL BREAKING

(a) Designated Employee

Warehouse operators must designate one or more employees, acceptable to the area supervisor, to break seals and sign shipping papers. Such employees can only break company or warehouse seals on incoming shipments.

b) Inspector

Official seals securing restricted product and approved warehouse seals, covering shipments of meat byproducts or certified pet food, when used to certify product entering an official plant or a certified animal food plant are to be broken only under inspector's supervision. The approved warehouse may print warning tags to deter breaking by other employees.

8.76 SHIPPING, RECEIVING

a) Identification of marked product

Unpackaged, marked federally inspected product may be shipped from an official plant or port of entry to an approved warehouse. Warehouse

employee(s) should record (1) date of arrival; (2) carrier; (3) shipper and his official plant, or name of shipper or importer for imported meat; (4) warehouse customer record for whom the meat is stored; (5) a description of the meat; (6) quantity in the lot; (7) warehouse lot number.

Each lot of inspected and passed product from an approved warehouse for entry into another approved warehouse or official plant must be accompanied by a warehouse certification waybill or a serially numbered printed shipping form. The shipping form shall have:

1. Date.
2. Printed form number.
3. Seller.
4. Consignee.
5. Warehouse lot number.
6. Name and number of official source from which product originated (not necessary if on receiving form).
7. Name of carrier.
8. Name and number of approved warehouse.
9. Date of shipment.
10. Title and signature of designated employee.

(b) Identification of Unmarked Product

Unmarked product can be removed from properly marked containers under the provisions of the identification service outlined in Section 350.3(a) of the Voluntary Inspection and Certification Service of the Meat and Poultry Regulations. The product would then be held under security in a manner to maintain identity (caged and locked, separate rooms and locked, crossed taped and stamped).

Removal from the secured area would be carried out under the provisions of the identification service. Only those products that had maintained their identity as a federally inspected product would be permitted to be shipped.

Product shipped in unmarked or unlabeled containers must be under

- * Company seal implemented through identification service with an identification seal.
- * Product may be branded or labeled in properly labeled containers under the identification system and moved in accordance with Section 1.75(a) of the Meat and Poultry Inspection Manual.

* (b) Animal Food

Shipping denatured byproducts for use as pet food shall be done under company seal and MP Form 508. However, direct shipment of undenatured byproduct for certified pet food may be done as outlined in the regulations Section 1.75(b).

1.77 LOT IDENTIFICATION

Each lot of product received by warehouse must be properly identified. Unmarked marked product shall be properly segregated and identified. Lot number. Lot number shall be marked on every carton in the lot of properly marked containers of lungs or other identified animal byproducts received under company seal from a federally inspected plant for certified pet food.

18.78 PRODUCT RECONDITIONING**(a) Unpackaged Product**

Unpackaged meat received for storage shall be checked by warehouse employee, and shall not be stored unless it is clean and in good condition. Unclean articles shall be cleaned before storage.

(b) Broken Packages

Torn and broken packages shall be segregated and reconditioned to protect product from contamination during storage and further shipping.

(c) Contaminated Product

Must be reconditioned under inspector's supervision.

(1) Warehouse reconditioning.

Arrangements must be made with the area supervisor for reconditioning contaminated product under Identification Service on a reimbursable basis.

- * (2) Plant reconditioning. Product
- * may be transferred to an official
- * plant for reconditioning. The ware-
- * house obtains MP Form 409-1 from the
- * area supervisor where the official
- * plant is located.

18.79 STORAGE

Meat products shall be stored in an orderly and sanitary manner.

*** (a) Separation**

- * Federally inspected unwrapped meat
- * and meat food products, and animal
- * byproducts for certified pet food must
- * be kept segregated by lot number and
- * stored separately from other articles.

(b) Packaged Product

It shall be placed on pallets, racks, or skids, and shall be properly stored to permit free air circulation and to prevent odor pickup from other stored products.

(c) Unpackaged Product

Except for hanging type, all meats

for storage shall be placed on dunnage, pallets, in tanks, or other containers.

Product creating an objectionable condition shall not be handled or stored in an approved warehouse.

Unpackaged product shall be handled *
and stored sanitarily. *

(d) Discontinued Storage

When a warehouse discontinues meat storage, the area supervisor shall be promptly notified.

18.80 RECORDS**(a) Warehouse**

Warehouse operators shall:

1. Stamp incoming MP Form 508, or *
certification form with warehouse lot
number stamped on cartons or identi-
fying unwrapped product. File with
lot records. Cross reference all
forms by lot number.
2. Prepare a certification (waybill
or shipping form) for all outgoing
shipments. File one copy, mail one
to MPI inspector at destination (or
receiving establishment), and affix
one inside sealed vehicle.
3. File all certification forms *
received and issued with product for
2 years.

(b) Inventory

An up-to-date inventory of stored products by lot shall be maintained. Records of lots, stored and shipped to *
an official plant or another approved
warehouse, must be readily available
to the inspector.

(c) False Records

Willful, false entries in warehouse records or certificates are subject to penalties of 18 U.S.C. 1001. Criminal penalties are also contained in the Agricultural Marketing Act (7 U.S.C. 1622(h)) and the Federal Meat Inspection Act (21 U.S.C. 601 et seq.) for specified offenses, including certain false representation and unauthorized use of official marks or other identification devices.

18.84 INSPECTION

18.84.1 Admission

Inspection teams and other authorized USDA personnel must be allowed to enter the warehouse to which assigned at any reasonable time, and to review facilities and records.

18.84.2 Deficiencies

The area supervisor arranges unannounced and timely supervisory inspections of premises, operations, personnel and records. Such inspections should be less often in warehouses with a low in-out volume. If circumstances warrant a more frequent inspection, the area supervisor shall be notified. When an MPI employee makes a warehouse inspection, he should have the last survey report available.

- * (1) Record checks. Records may be checked randomly selecting some of the following: (1) invoices, and certificates from warehouse file. Items to be checked are (1) lot numbers, (2) inventory, (3) product origin and destination, etc.

- * (2) File. The inspector should file following MP Form 508 and warehouse certificates according to warehouse number and lot number for 2 years.

- (3) Deficiencies. Insanitary conditions or improper procedures shall be reported through the area supervisor to the regional office. Reports will be kept on file and become evidence for withdrawal of service.

18.82 WITHDRAWAL

If required standards are not maintained, the area supervisor notifies (in writing) warehouse officials. When after reasonable time, deficiencies are not corrected or when routine inspection indicates serious deficiencies, the area supervisor recommends removal of the warehouse from the approved list to RD.

7-1

RD may cancel warehouse approval when (1) reliance cannot be placed on records or certificates of warehouse operator or his employees; (2) such operator or any of his employees or agency (a) failed to comply with any conditions of approval, (b) violated the FMIA (21 U.S.C. 601 et seq.) or Section 203(h) of the Agricultural Marketing Act (7 U.S.C. 1622(h)) or any of the regulations promulgated thereunder.

After warehouse operator is given opportunity to present his views, approval may be suspended according to the Administrative Procedures Act (5 U.S.C. 1008) pending final determination.

RETURNED PRODUCT

Subpart 18-0

(Regs: M-318; P-Subpart 0)

18.85 DEFINITION

Returned product in this subpart means any product which was shipped from an official establishment, delivered to an unofficial establishment (such as a retail store), and returned to the same or any other official establishment for any reason.

Product which can be identified as having been shipped and returned via the same carrier to the same or any other official establishment within 24 hours is not considered to be returned product. Such product is subject to normal reinspection by a program employee when entering the official establishment.

18.86 RESPONSIBILITY

(a) Plant

Every establishment receiving returned product will designate, with approval of the inspector in charge, an area or areas where returned product will be received. All returned

products can be received only into such designated area or areas. The returned product area(s) are to be maintained at a proper temperature to hold returned product in a wholesome condition. The area(s) must be thoroughly cleansed and sanitized, including containers, tools, equipment, facilities, and employees' hands and aprons, as often as the inspector determines necessary to prevent product contamination.

All returned products should be delivered to the returned product area as soon as practical when they arrive at the establishment. They should not be sorted, removed, or otherwise handled until the inspector has given his approval for such sorting, handling, or removal.

(b) Inspector

The inspector will examine all products which would require inspection. Product that is wholesome and bears the official marks of Federal inspection will be released.

Returned product that has been reprocessed or reconditioned can be used for human food only if it is found on final inspection to be not adulterated nor misbranded. The product should not be removed from the establishment unless it is properly marked or labeled.

Returned product not identified with the official marks of Federal inspection can enter **only the returned product area(s)** for inspection. It must be held there for disposition in the following manner:

1. If the inspector can determine that products have been prepared under Federal inspection or imported and products are found to be wholesome, they may be released.

2. If the inspector can determine that products have been prepared under State inspection and they are found to be wholesome, they may be released for distribution in the State where prepared. However, they cannot be

released for distribution in interstate commerce.

3. Unwholesome or unidentifiable products must be condemned and destroyed.

CARCASS SPRAYING

Subpart 18-P

(Regs: M-318, P-Subpart O)

18.91 CARCASS SPRAYING

(a) Water sprays, whether chlorinated or not, may be used intermittently on carcasses during chilling provided a quality control program is approved by the Regional Director. In order to receive approval, the establishment must:

1. Submit to the Regional Director through the inspector in charge the complete details of the proposed quality control program in accordance with § 318.4 of the Regulations and paragraph (b) below;

2. Furnish a statement that the spray procedure does not cause insanitary conditions, such as rust and moisture dripping, in the cooler;

3. Submit the results of a 250 carcass test showing hot, prewashed weights and sprayed, chilled weights of the same 250 carcasses in accordance with paragraph (c) below; and

4. If chlorine is to be used, furnish a statement as to the concentration of the chlorine in parts per million.

*

(b) The details of the proposed program must include all facility and equipment changes needed to install the new system, including the type and location of monitoring equipment such as gauges, timers, and meters, calibration schedules

* ... equipment and scales, accurately recording correct weights, both before washing and after chilling.

* ... intentions to spray the

* ... performing the

* ... test, no less than

* ... are weighed per day for

* ... than 10 working days. Each

* ... 250 carcasses must

* ... no weight gain for the

* ... receive initial approval.

* ... carcass shows a weight gain,

* ... carcasses being chilled that

* ... be held until each carcass

* ... for that day loses any

* ... initially showed. All

* ... spraying must be stopped

* ... the system is adjusted. The

* ... approval test can then be

* ... over. If none of the 25 or

* ... carcasses representing a day's

* ... gain weight, then that

* ... production can be shipped

* ... the 10-day test period prior

* ... of the system.

* ... In lamb plants where it is the

* ... to weigh two or more

* ... hung by "A" frames or

* ... hangers from a single

* ... during spray chilling, it is

* ... to treat the multiple

* ... as a single unit and weigh

* ... units. In such cases, the total

* ... weight of the multiple

* ... unit would constitute the

* ... chilled weight of the unit.

* ... multiple-hung lamb carcasses

* ... be treated as one carcass unit,

* ... references to carcasses in

* ... text will also include the

* ... lamb carcass unit.

* ... If the establishment uses a

* ... spray, microbiological tests

* ... efficacy of the chlorine are

* ... required.

* ... The inspector, during the

* ... and testing of the

* ... will make sure that the

* ... establishment is not creating an

* ... sanitary condition in the cooler

* ... should review enough weighings

* ... reweighings to ensure that the

establishment is fairly and accurately recording correct weights, both before washing and after chilling.

(g) Once the program has been installed and successfully tested, the establishment must continue to sample and test a minimum of 10 carcasses per lot per day, or as required by any alternate program established under paragraph (i) below. The inspector will monitor this by reinspecting 20 to 100 percent of the carcasses tested by the establishment at no greater interval than once a week.

(h) No carcass will be permitted to gain weight as a result of exposure to water spray. Alternate control programs are governed by paragraph (i). Otherwise, if an establishment employee discovers that one of the carcasses selected for the daily monitoring has gained weight, the entire lot is affected. If each carcass is marked with its own hot weight, the chilled lot can be reweighed carcass by carcass and if a carcass has not gained weight, it may be released. Those carcasses which have gained weight will be retained until the weight gain has been lost. If each carcass is not marked with its own hot weight, the entire lot must be retained until the sample unit has lost the weight it gained. In either case, the system must be reproved with another 250 carcass test in accordance with paragraph (c) above.

(i) The Department will consider alternate control programs. However, they must comply with the same quality characteristics as the aforementioned program. A 250 carcass test, as described under paragraph (c) above, must also be performed to qualify alternate programs. In addition, an alternate program must provide at least 95 percent ongoing assurance that over a 13-week period consisting of 5-day workweeks, no more than 0.5 percent per quarter of the

* carcasses represented by the samples
* will gain weight. The procedure
* must also provide adequate process
* control. Any alternate procedure
* submitted to the Department must
* contain all assumptions about the
* data distribution and the
* methodology employed and sufficient
* raw data and data analysis to allow
* for an independent check of these
* points. Alternate spray chill
* programs must be submitted to the
* Department of Agriculture, Food
* Safety and Inspection Service, Meat
* and Poultry Inspection Technical
* Services, Processed Products
* Inspection Division, Washington,
* DC 20250, for review and
* evaluation.

(j) If the establishment wants to make a significant change in its spray system such as (1) volume of water used, (2) pressure of water, (3) length of time spray is administered, (4) length of time interval between sprays, or (5) size of droplet used, another 250 carcass test is required first. The test must involve all the coolers which the establishment intends to use in its spraying process.

PART 19
 DEFINITIONS AND STANDARDS OF IDENTITY
 OR
 COMPOSITION

STANDARDS OF IDENTITY
 OR
 COMPOSITION

Subpart 19-A

(C.F.R. M-317, 318; P-Subpart P)

19.1 PRODUCT AMENABILITY
 (C.F.R. M-317, 318; P-Subpart P)
 (C.F.R. M-317, 318; P-Subpart P)

19.2 PRODUCT
 (C.F.R. M-317, 318; P-Subpart P)
 (C.F.R. M-317, 318; P-Subpart P)

concentrate, isolated soy protein, nonfat dry milk, calcium reduced skim milk or dried milk.

(c) Cooked

(1) Rework. See section 18.24(a)(5). *

(2) Poultry. Sausage products may contain raw and/or cooked poultry (meat and poultry byproducts) in amounts prescribed by regulations (M-Subpart G).

(d) Other Cooked Sausage

(1) Braunschweiger. Pork skins, pork snouts, and other meat byproducts, except fat, are not customary ingredients of "Braunschweiger."

(2) Liver Sausage. It may not be prepared with meat byproducts to the exclusion of meat. It may contain poultry not exceeding 15 percent of the meat and liver portion of the formula.

(3) Mettwurst. It may not contain byproducts or extenders.

19.4 LOAVES

Phosphated Trimmings

Preparation of loaves, other than meat loaves, generally involves use of byproducts from processing operations including cured and uncured products.

Trimmings from preparation of pork cuts, cured with approved phosphates besides other curing ingredients, may be used without limitation in loaves other than meat loaves. When such trimmings are used, phosphates may be listed in the ingredient statement using the term "sodium phosphates."

19.3 SAUSAGE

(a) Fresh

Farm or country style. When sausage products are labeled "farm style" or "country style," they must be prepared with natural spices with exclusion of oleoresins, essential oils, or other spice extractives. Sugar is the sweetening agent for "farm style" or "country style."

(b) Semidry

Thuringer. It may not contain binders or extenders; e.g., cereal, vegetable starch, starchy vegetable flour, soy flour, soy protein

PART 20

RECORDS, REGISTRATION AND REPORTS

REPORTS

Subpart 20-A

(Regs: M-320; P-Subpart Q)

a report may be made by telephone directly to STS-PTE at any hour of the day by dialing 301-345-6888.

Reports of adulteration or misbranding, not involving health hazards, should always be reported to STS-PTE through appropriate field offices during normal business hours.

20.1 INJURY

On-the-job or job-related injuries must be properly recorded on Form MP 448, "Injury Register."

All forms in the "Injury Reporting Kit," envelope MP 449, must be completed when medical attention by a physician, or when loss of time exceeding one full day or shift is involved.

20.2 ZOONOSSES

Inspectors in charge must report by phone to the area office when an illness affects plant employees as a result of contact with animals brought to the plant. A written report should be promptly submitted indicating nature of illness, onset date, number of people affected, suspected etiology, and action taken by health officials or other governmental agencies.

Plant management shall be informed of such reports.

20.3 FOOD POISONING; ADULTERATION;
MISBRANDING

(a) Prompt Report

Actual or potential foodborne disease incidents involving meat or poultry products should be reported promptly. Reports should be routed to STS-PTE through area and regional offices. However, if this is not possible,

(b) Report Information

The report should provide the nature of hazard and the name, address and telephone number of the person who can furnish additional information. It should include, if available, product involved; where ingested; time of ingestion and onset of illness; number of persons involved; name and establishment number of processor; processing, packaging, and handling procedures; and other pertinent information.

(c) Reporting Procedures

1. Inspectors report actual or potential health hazards or consumer complaints involving adulteration or misbranding to supervisors.
2. Supervisors notify local health officials and exchange information relative to the problem. Supervisors relay all information (including health official contact) to area supervisors.
3. Area supervisors notify RD.
4. RD telephone STS-PTE using 24-hour telephone number (301-345-6888).

20.4 PRODUCT REJECTION BY MILITARY

(REFERENCE AMS, MEAT GRADING
BRANCH.)

NOTE! DUE TO CONDENSED MATERIAL, PAGE
187 WAS NO LONGER NEEDED.

20.5 CERTIFICATES (Poultry)

(REFERENCE AMS, MEAT GRADING BRANCH.)

20.6 INSPECTION WORK

(a) Ante- and Post-Mortem Inspection

Inspectors shall report results of ante- and post-mortem inspection of poultry on Form MP 514 and MP 513 (see Chart 20.1).

(b) Processed poultry inspection

Results are to be reported on Form MP 536.

FORMS

Subpart 20-B

The necessary for recording and reporting activities related to the Federal Poultry Inspection Program. Where the necessary information is available, all forms should be accurately completed.

Following is a description of the most commonly used forms in meat and poultry inspection work.

20.9 FORM MP 22

See Chart 20.1. The inspector shall use a separate form for each sample submitted to the laboratory for chemical analysis. This form is prenumbered to positively identify the sample with a number. It is not an accountable form. Designations and instructions on the form are generally self-explanatory and should be closely followed. Print, type or check all applicable entries as follows:

1. ☐ Self-explanatory.
2. ☐ Enter retain tag number when product is retained pending laboratory report.
3. ☐ /1/ Meat--check when sample is meat product.
4. ☐ /2/ Poultry--check when sample is a poultry product.
5. ☐ /3/ Trust Grading--check when sample is for specification acceptance program.
6. ☐ /4/ Trust Inspection Meat--check for all samples produced under Food Inspection Service, animal food inspection, and other reimbursable service-type meat inspection.
7. ☐ /5/ Trust Inspection-Poultry--check for all samples produced under rabbit or pheasant inspection, and other reimbursable inspection service related to poultry.

☐ /6/ Other (specify)--meat or poultry and name of agency for which inspection is made (Department of Justice, Department of Interior, etc.)

5. Self-explanatory.

6. Product Code--enter product code. Refer to Exhibit A, Product Codes.

When both cereal and nonfat dry milk are added to product, record code for nonfat dry milk.

Example: Franks with NFDM and cereal, record code 1330-14.

Record miscellaneous code for a general category if a code is not indicated for a specific product in that category. Example: luncheon meat sausage, record code 1340-91. Do not assign a code number for nonmeat food products or meat samples analyzed for specification work.

7. Laboratory name and number (see Part 23).

8. Check if sample is a single sample or a composite sample. If a composite sample, enter "how many" in the composite. Example: (three 1-pound packages).

9. ☐ /1/ Retail sample--check when sample is collected in retail store.

☐ /2/ Supervisory sample--check when sample is collected by supervisory personnel.

10. Complete only for sample of import product not yet accepted for entry. Handle samples of accepted product as domestic samples.

11. Print or type name, and initial.

12. Check box(es) provided to left of analysis desired. Each sample must be accompanied by an MP 22 asking for specified information. Otherwise, the laboratory discards the sample and returns the form. If desired analysis is not listed, place a checkmark to the left of first blank box and write in desired analysis. Use additional blank boxes when necessary. Laboratory analysis is an excellent inspection tool, but it is time consuming and expensive. The analysis should

PRODUCT CODES FOR LABORATORY SAMPLES

CURED BEEF PRODUCTS		BEEF COOKED		SAUSAGE SMOKED OR COOKED (Cont)	
CORNER BEEF BRISKET	1010 10	BEEF TONGUES	1210 10	SMOKED	REGULAR
CORNER BEEF	1010 30	MISCELLANEOUS	1210 90	SAUSAGE	CEREAL
CURED BEEF TONGUES	1010 50	PORK COOKED			NFD MILK
MISCELLANEOUS	1010 90			POLISH	REGULAR
				SAUSAGE	CEREAL
					NFD MILK
CURED PORK PRODUCTS		HAMS	1220 10		1340 74
	1020 10	PICNICS	1220 30		1340 74
	1020 30	BUTTS	1220 50		1340 91
	1020 50	MISCELLANEOUS	1220 90	MISCEL- LANEOUS	CEREAL
	1020 90	SAUSAGE FRESH FINISHED			1340 93
BEEF SMOKED AND/OR DRIED		PORK SAUSAGE	1310 10	HAMBURGER	
	1110 10	BREAKFAST SAUSAGE	1310 30		1460 10
	1110 30	PORK AND BACON SAUSAGE	1310 50	CHOPPED BEEF	1460 30
	1110 90	MISCELLANEOUS	1310 90	MISCELLANEOUS	1460 90
PORK SMOKED AND/OR DRIED		SAUSAGE DRIED OR SEMI-DRIED		CANNED PRODUCT	
		SALAMI	1320 10	LUNCHEON MEAT	2610 10
	1120 11	CERVELAT	1320 30	CANNED HAMS	2620 20
	1120 12	PEPPERONI	1320 50	BEEF HASH	2630 30
	1120 21	THURINGER	1320 70		REGULAR
	1120 22	MISCELLANEOUS	1320 90	VIENNAS	CEREAL
	1120 31	SAUSAGE SMOKED OR COOKED			NFD MILK
	1120 32				2650 14
	1120 41	FRANKS AND WIENERS	1330 11	FRANKS AND WIENERS	2660 51
	1120 42		1330 13		CEREAL
	1120 51		1330 14		NFD MILK
	1120 52		1340 11	DEVILED HAM	2670 60
	1120 60	BOLOGNA	1340 13	CHOPPED BEEF	2720 70
	1120 91		1340 14		REGULAR
	1120 92		1340 31	SAUSAGE	CEREAL
		LIVER SAUSAGE	1340 33		NFD MILK
			1340 34	CANNED LOINS & PICNICS	2770 84
		SMOKED PORK SAUSAGE	1340 40		2840 90

... purpose. Do not indis-
... laboratory analy-
... of product as it
... labeled and list of ingredi-
... order of predomi-
... proprietary mixtures are
... list of ingredients as
... shipping container, name
... of manufacturer, and pur-
... which the material is in-
... Also, include any information
... to the analyst and requests
... information.

... sample is sent to the labora-
... a special purpose, a notation
... on laboratory form to
... effect, or bear reference to
... indicating need for
...

... analysis is requested for
... other than meat and meat food
..., the laboratory will check
... the sample is in compliance.

... for laboratory use only.
... Strip. The inspector shall (1)
... type of product, date, brief
... of request (protein, moisture,
... water, fat, etc.), retain tag
... if product is retained, and
... (2) remove and attach ori-
... sample with rubber band (Pre-
... sample number and type of
... must be legible without remov-
... the tear strip.); (3) retain sec-
... copy in inspector's office until
... laboratory results are received, then
... (if desired); (4) not separate
... copies from MP Form 22 (or tear
...).

... side, 24-26--self-explana-
...

(a) Mailing to Laboratory.

... remaining copies in a plastic
... to prevent leakage stains.

... then in shipping container with
... and avoid form wrinkling.

... facilitate laboratory's return
... of the form, enclose a franked,
... self-addressed envelope.

(b) Distribution of Returned Forms

(1) Nonviolations. Laboratory checks
"In Compliance" box in block 14 for
all products, and sends copies 1 and
2 to inspector. Inspector sends copy
2 to area supervisor.

(2) Violations. Laboratory checks
"Action by Inspector" box in block 14,
and sends copies 1, 2, and 4 to in-
spector. Inspector evaluates the re-
port; takes action according to toler-
ance guidelines in Part 18; completes
items 24 through 26 on the back of
copies 1, 2, and 4; sends copy 2 to
area supervisor, copy 4 to regional
office, and files copy 1. Circuit
supervisor initials copy 1 if he con-
curs with action taken. Area super-
visor initials copy 2 if he concurs with
action taken, and files this copy.

20.10 MP FORM 23

See Chart 20.1. The inspector com-
pletes all six copies when submitting
objective or selective phase specimens
for biological residues. Mail copy
five (confirmation copy) to regional
or area office as instructed by RD.
If a confirmation copy is not request-
ed by regional office, leave copy five
intact and submit with specimen.
Attach four to sample. Enclose a
self-addressed envelope to facilitate
the laboratory's return of MP 23.

Print, type, or check all applicable
entries as follows:

1. Name of State and number in lieu
of circuit.

2-5. See MP Form 22.

6. Self-explanatory.

7. Self-explanatory.

Enter country name, code, establish-
ment number, custom entry number, and
MP 410 number.

8. When livestock or poultry origi-
nate from a premise with a history of
biological residue violation and are
being resampled under Selective Phase,
also enter in the Ante-Mortem and

Post-Mortem Remarks space of 16 "re-sample notification Nos. 1 or 2," as applicable.

9. Enter control number for objective phase samples. Enter N/A unless specimens are submitted because of a special project. Identify special projects by name or number.

10. Enter N/A unless the specimen is one of a series submitted because of a study made of a particular lot, flock, or herd. If specimen is one of several in a series, place sample number (preprinted number) of previous specimen in this block.

11. Enter animal species or poultry class and code as listed below:

Cattle - 01	Young
Calves - 02	Chickens - 21
Sheep - 03	Turkeys - 22
Goats - 04	Ducks - 23
Swine - 05	Geese - 24
Horses - 06	Fowl - 25
Other - 08	

12. When submitting specimens for biological residue analysis, enter approximate age of animal or bird.

13. Enter sex of animal or bird. Check in all specimens sent for biological residues. M and F indicate male or female. N indicates neuter (steer, barrow, etc.).

14. Check appropriate box. Each request for a specific test, analysis, etc., requires a separate MP 23.

Should more than one MP 23 be completed, enter sample number (preprinted number on upper right corner of the form) of related specimens in No. 10, "Related Sample No's."

15. Check appropriate box indicating tissue submitted. If specimen is not listed, check box 06. Do not make any entries in this block when submitting samples from imported product.

16. Use when submitting samples from imported product for biological residues.

Enter product name under ante- and post-mortem remarks, and product code

under "Code." See Part 27 for import product codes. When product is retained pending laboratory results, enter such information in this block. If the laboratory results are to be telephoned or wired collect to the plant, include name, address, and phone number of plant where product is held or where inspector can be reached.

17. When submitting specimens for diagnostic purposes, the veterinarian shall enter his clinical diagnosis. This information is helpful to the pathologist.

18. Self-explanatory.

19-25. For laboratory use, except "Control Total (19)" to be entered by Automated Data Processing (ADP)

20.11 FSIS FORM 9300

(REFERENCE FSIS DIRECTIVE 6200.1, 9/8/86.)

20.12 FSIS FORM 9300-5.

(REFERENCE FSIS DIRECTIVE 6200.1, 9/8/86.)

20.13 MP FORM 404.

(REFERENCE FSIS DIRECTIVE 7010.3, 8/6/86.)

20.14 MP FORM 407.

(REFERENCE FSIS DIRECTIVE 7010.3, 8/6/86.)

NOTE! DUE TO CONDENSED MATERIAL, PAGES 193, 194, 195, 196, 196a, 196b, 196c, 196d, 196e, 196f, 196g, 197, 198, 198a, 199, 200, 201, 202, 203, 204, 205 WERE NO LONGER NECESSARY: THEREFORE, PAGE 206 FOLLOWS THIS PAGE.

USE MP FORM 407-4
 Complete in duplicate for each material rejected. Send duplicate to Chicago Data Services. Report rejected quantity in pounds. Negative reports are not required. Do not report rejected quantity. Report rejected items under the following categories.

(a) Materials Rejected

(1) Spices and seasonings:

Nutmeg	
Allspice	
Sage	
Dextrose	
Seeds	
Dill	
Caraway	
Fennel	
Mustard	
Seasonings	
Sausage	
Bologna	
Loaf	
Ham spices	
Sauces	
Hot	
Pizza	
Honey	
Syrup	
Vinegar	

(2) Flour and cereal products:

Wheat flour	Wheat cereal
Corn flour	Potato starch
Soya flour	Bread
Barley	Batter mix
Potato	Cracker meal
Roller oats	Corn meal
Rice	Macaroni
Farina	Spaghetti
Cereal binder	Noodles
	Tapioca flour

(3) Dairy and egg products:

Nonfat dry milk	Sodium caseinate
-----------------	------------------

Whole milk
 Whole skim milk
 Dry whole milk
 Whey
 Breeding mix dip
 Process cheese spread

Eggs, whole, fresh
 Egg white, fresh,
 frozen, powdered
 Egg yolks, fresh,
 frozen, powdered

(4) Fruits or vegetables (fresh, canned, or dehydrated):

Potatoes	Olives
Peas	Beans
Carrots	Bean sprouts
Parsley	Tomatoes, fresh
Onion	paste
Pimientos	puree
Pickles	juice

(5) Soaps, cleaners, oils:

Tripe cleaner	Boiler compounds
Toilet cleaner, etc.	Metal cleaner
Floor cleaner	Clothes cleaners
Oakite	Hand soaps
General cleaner	Mineral oil
Brick cleaner	Cotton seed oil
	Paraffin

(6) Casings (natural and artificial):

Casings
 Plastic overwraps
 Visking bags

(7) Curing agents:

Pickle	Prague powder
Cures	Sal brine
Wastphalia powder	

(8) Miscellaneous:

Bicarbonate of soda	Antioxidants to prevent discoloration
Vitamins	
Gelatin	
Mono-glycerides	Tenderizers
Stabilizers	Vegetable oleo-margarine

(b) Cause for Rejection

(1) Noncompliance with regulations:
 Label not approved for use of rejected product
 Product not labeled
 Unauthorized color or flavor
 Ingredients in excess of authorized allowances
 Insufficient ingredients

Manufacturer and/or address unknown
Improper markings on product
Product contains prohibited ingredients

(2) Contamination:

Contains insects and/or weevils
Contains foreign material
Rodent contamination present
Wormy
Unclean

(3) Objectionable odors, taste, or color:

Excessive odors	Unstable color
Over age	Rancid

(4) Sour, moldy:

Decomposed
Toxic

(5) Unsound canned goods.

(6) Other.

(c) Disposition

Removed from establishment:

Converted into animal feeds
Used in nonfood departments

(1) Returned to supplier.

(2) Destroyed by establishment:

Sewage	Denatured and removed
Burned	Tanked
Garbage	

(3) Held for Food and Drug Administration.

(4) Other.

20.16 MP FORM 455

(REFERENCE PART 8.6,
SANITATION REPORT.)

20.17 MP FORM 460
(OBSOLETE.)

NOTE! DUE TO CONDENSED MATERIAL,
PAGE 208 WAS NO LONGER
NECESSARY: THEREFORE,
PAGE 208a FOLLOWS THIS PAGE.

20 18 MP FORM 519

See Chart 20 1

Product Enter name of product being inspected (beef carcasses).

Product Code Enter applicable product code (code 001 for beef carcasses).

Lot Number. Determine and enter applicable number Example: If this is the first lot of beef carcasses examined this date, enter "1" in this block

Lot Size. Enter number of sides in the lot

Sampling Plan. With a checkmark, designate type of plan being used (double, single). If double plan, designate with a checkmark in first step column if only first step is necessary. If second step is necessary, checkmark the second step block. If online sampling is used, leave space blank.

Sample Size. Record size of sample examined. If online sampling is used, use an encircled 3 and a separate form for each online lot inspected.

Minor, Major, Critical Defects Columns. Record defects in proper column (minor, major, or critical) under first step only when single sampling plan is used. Record first step defects in first step column on first step of double sampling plan, and second step defects in second step column when second step is necessary in double sampling plan. Rest of form is self-explanatory.

Chart 20.1 - Forms

209

FORM	USE	COPIES	SUBMITTAL	DISTRIBUTION	OTHER INFORMATION
MP 4, Odd Hour Inspection Report	Each inspection	3	See form	See form	See form
MP 7, Certificate of Wholesomeness	Export to Belgium	4	Completed by plant and inspector. Upon completion	Same as MP 412-3	See form
MP 11, Services Rendered	Chargeable Service	4	Monthly	See form	*
MP 12, Authorization Card	Cross-licensed inspector	1		Each employee	*
MP 17, Certificate for Glands, Organs, and Offals Imported for Pharmaceutical Purposes	Export to France	4	Completed by plant and inspector. Upon completion	Same as MP 412-3	See form
MP 22, Chemical Laboratory Analysis	Chemical analysis	5	For each sample or composite	See form	See sec. 20.9
MP 23, Laboratory Report	Pathology, microbiology or residue analysis	6	For each sample or composite	See form	See sec. 20.10
MP 31, Establishment Application for export of meat or poultry	Export	2	Completed by plant. Upon completion	Original and copy to FPS for signature of Deputy Admin.	See form *
MP 35, U.S. Rejected and U.S. Retained Tags	Identification of facilities, equipment or product in noncompliance	As required	Remove stub and retain until item acceptable. Attach to item(s).	Remove tag when item is acceptable. Discard tag and stub	Used and removed by inspection personnel only. Indicate initials on tag, date, inspector's and corrective action *
MP 36, Water and Temperature Checks	Daily. To record temperature and water used	1	See form	See form	Record temperature of chill water and product--carcass, parts, giblets, parts on cutup line, etc.--and water used in continuous chillers.
MP 40, Health Certificate for Importation of Fresh Poultry Meat into the European Economic Community (EEC)	Export to Countries in the European Economic Community (EEC)	4	Completed by MPI veterinarian. Upon completion.	With shipment	See form

Note: See footnotes at end of chart

Chart 20.1 - Forms, con't.

	Use	Copies	Submittal	Distribution	Other Information
	Report to Italy	4	Completed by MPI veterinarian. Upon completion	Same as MP 412-3	See form
	Report to Belgium	4	Completed by plant and MPI veterinarian. Upon completion	With Shipment	See form and sec. 22.23
	Report to the Federal Republic of Germany	4	Completed by plant and MPI veterinarian. Upon completion	With shipment	See form and sec. 22.35
	Report to the Federal Republic of Germany	4	Completed by plant and MPI veterinarian. Upon completion	With shipment	See form and sec. 22.35
	Report to the Federal Republic of Germany	4	Completed by plant and MPI veterinarian. Upon completion	Same as MP 412-3	See form and sec. 22.35
	Import inspection	5	Upon completion	See form	
	Import inspection	2	Upon completion	Gov't office-copy--broker-original	
	Import inspection	1	Retained by inspector	Gov't office	
	Import inspection	1	Retained by inspector	Gov't office	
Report to the Federal Republic of Germany	Report to the Federal Republic of Germany	4	Completed by plant and MPI veterinarian. Upon completion	Same as MP 506	See form

Chart 20 1 - Forms, con't

Form	Use	Copies	Submittal	Distribution	Other Information
MP 81, Certificate Which Must Accompany Imported Frozen meats, Offals, Poultry, Animal Products and Products of Animal Origin	Export to France	4	Completed by plant and MPI veterinarian. Upon completion	Same as MP 412-3	See form
++MP 82, Sanitary Certificate (Poultry)	Export to France	4	Completed by plant and MPI veterinarian. Upon completion	With shipment	See form
++MPI 112, Laboratory Specimen Receipt	When specimen released to private or commercial laboratory	3	For each sample or composite	See form	
MP 132, Application for Label Approval	As required	3	By plant for each label	PLS Gov. office	See form
MP 401, Application for Federal Meat and Poultry Inspection	To obtain Federal inspection	4	Upon request for inspection. Completed by applicant	See form	Complete all sections. If not applicable, enter "N/A"; if negative, "No" or "None."
+MP 402-1, Summary of Ante-Mortem Examination	Ante-mortem inspection	1	Upon completion	Gov. office	Optional
+MP 402-2, Identification Card--Ante-Mortem	U S suspect	1	Upon completion	Gov. office	Post-Mortem section - optional
FSIS 9300 Series, Ante-Mortem and Post-Mortem Inspection Summary	Ante-and post-mortem inspection	2	Weekly	DSC, Des Moines orig Gov office duplicate	See sec. 20.11 "
FSIS 9300-5, Final Disposition of Retained Carcasses	For suspects and retained carcasses	1	Prepared by VMO	Gov. office	Separate form * for tuberculosis reactor; see sec. 20.12
+MP 403-7, Certificate of Ante-Mortem or Post-Mortem Disposition of Tagged Animals	Slaughter plant	2	Upon plant request; by VMO	Plant-orig. Gov. office-copy	Accountable, keep under security. Record only official (USDA) tags--U.S. Suspect, U.S. Retained, reactor, back-tags, etc.

Form	Use	Copies	Submittal	Distribution	Other Information
MP 403-10, Application and Permit to Obtain Specimens from Official Meat Establishments	Release of specimen(s)	3	Completed by applicant. Submitted to inspector in charge	See form	Only items specified on form may be removed
MP 404, Processing Operations at Official Establishments	Completed by management of proc. operations	3	Weekly; to inspector in charge	DSC, Chicago-orig. Gov. office-copy Plant - copy	See sec. 20.13
MP 406-2, Daily Report of Denaturing and Tanking	For cond. carcasses and/or parts	1	Optional Completed as required by area supervisor	Gov. office	Record tag and/or seal numbers, sealing and seal breaking time, inspector's name
MP 406-3, Daily Report of Handling Meats Passed for Cooking	For carcasses and/or parts passed for cooking	1	Daily	Gov. office	
MP 407, Meat and Meat Food Products Condemned on Reinspection and Destroyed	For product cond. on reinspection by the inspector	2	Weekly	DSC, Chicago - orig. Gov. office-copy, Plant - A copy may be obtained upon request	Not used for repayment or claim adjustment between plants. Negative report not required See sec. 20.14
MP 407-4, Materials Rejected for Use	For each material rejected	2	Upon completion	DSC, Chicago - orig. Gov. office-copy	Circle one code no. for each group. Describe material, cause of rejection, disposition and agency notified; See sec. 20.15
MP 408, Request and Notice of Shipment of Sealed Meat/Poultry	Product shipped under seal	4	Upon completion	Destination inspector-orig. Inside sealed car-copy. Gov. office-copy	May be modified to cover shipment of product for further processing
MP 409-1, Permit to Return Alleged Unsound Product	Alleged unsound product	3	Upon completion	See MR-325.10	Identifies and permits return of alleged unsound product to official plant
MP 410, Imported Meat and Meat Food Products. Application and Report	Inspection of imported product	8	Upon completion	See form and sec. 27.19(b)	See sec. 27.19
MP 410-10, Official Veterinary Certificate of Wholesomeness	Export of fresh meats to Germany	1	Upon completion	With shipment	Fresh meat and edible organs
MP 410-11, Official Veterinary Certificate of Wholesomeness	Export of prepared meats to Germany	1	Upon completion	With shipment	Processed meat products

Chart 20.1 - Forms, con't.

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Form	Use	Copies	Submittal	Distribution	Other Information
+MP 410-12, Animal Health Certificate for Importation of Meat from Domestic Swine	Export of swine meat to Germany	1	Upon completion	With shipment	See form
+MP 410-13, Health Certificate for the Import of Meat from Domestic ruminants	Export of ruminant meat to Germany	1	Upon completion	With shipment	See form
+MP 412, Application for Export Certificate and/or Stamps	Export. Completed by plant	2	Upon completion	DSC, Des Moines - Orig. Area Office-copy	List all product. Request on one form only one type of certificate and/or stamps. *
+MP 412-3, Regular Export Certificate	Export	4	Completed by plant and inspector. Upon completion	Shipper- orig., duplicate and quadruplicate. Gov. office-triplicate	Show establishment no. (s) and address of consignor
+MP 412-7, USDA Meat Inspection Service, Certificate of Pork Product	Export of lard to Colombia	5	Upon completion	With shipment orig. & 3 copies. Gov. office-4th copy	See form
+MP 412-8, Sanitary Certificate (Certificat Sanitaire)	Export to Algeria, Poland	1	Upon completion	With shipment	Use USDA-MPI seal *
+MP 412-9, Sanitary Certificate for Netherlands	Export to Netherlands	1	Upon completion	With shipment	Meat food products. Put USDA-MPI seal on form
+MP 412-9-1, Meat Certificate for Importation into the Netherlands	Export to Netherlands	1	Upon completion	With shipment	Animal casings, fresh meat and meat byproducts
+MP 412-11, Sanitary Certificate	Export to France	1	Upon completion	With shipment	Fresh meat and/or offal
+MP 412-12, Sanitary Certificate "D"	Export to France	1	Upon completion	With shipment	Processed meat and/or edible fat
MP 412-13, Certificate for Export to Japan	Export to Japan	4	Completed by plant and inspector in charge. Upon completion	With Shipment	See form
+MP 412-14, Veterinary Certificate for Export of Poultry to the United Kingdom	Export to United Kingdom	4	Completed by plant and MPI veterinarian. Upon completion	With Shipment	See form
+MP 413, Certificate for Importation of Casings into the Netherlands	Export to Netherlands	4	Completed by plant and MPI veterinarian. Upon completion	Same as MP 415-4	See form

Form	Use	Copies	Submittal	Distribution	Other Information
+MP 414-3, Regular Horsemeat Export Certificate	Export	3	Completed by plant and inspector. Upon completion	Shipper - orig. & duplicate, Gov't office triplicate	Show establishment number(s) and address of consignor
+MP 415-3, Inedible Product Export Certificate	Export	4	Upon completion	With shipment Gov. office-copy	See form
+MP 415-4, Animal Casings Export Certificate	Export	4	Upon request	With shipment Gov. office-copy	See form
+MP 415-5, Special Export Certificate for Animal Casings	Export	2	Upon completion	With shipment	See form
MP 420-3, Receipt of Accountable Property	Accountable property	3	Upon completion	See form	
MP 423, Submission and Approval of Plans and Specifications	Applying for Federal inspection by applicant	4	See form	See form	
+MP 437, Notice of Receipt of Unclean or Unsound Product	For unclean or unsound product	4	See form	See form	Not issued to plant
MP 441, Permit to Ship Meat or Poultry Labels Between Official Establishments	Transfer of labels between plants	See form	With each batch of labels	See form	
MP 449, Reporting Kit	Injury		See form	See form	
+MP 450, Scoresheet for Boneless Manufacturing Meats other than Pork	Boneless meat inspection	2	Upon completion	Gov. office-orig. and copy	Complete for domestic and import inspection-1,2,11,12,13,14,15,16,17. Domestic only--3,4,5,6,7. Import only--8,9,10. See also form and Subpart 18-B.
+MP 450-1, Online Inspection of Boneless Manufacturing Meats other than Pork	Boneless meat reinspection (online)	2	Completed and filed by plant	Available to MPI personnel	See also Subpart 18-B
+MP 450-2, Worksheet for MP Form 450 (Imported Meats)	Boneless imported meat	1	Upon completion	Gov. office	See form

Chart 20.1 - Forms, con't.

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Form	Use	Copies	Submittal	Distribution	Other Information
MP 455, Sanitation Report	Daily sanitation	2	Weekly	See form Gov. office-orig. Plant-copy	Explain items marked "N" or "U" in "remarks". Upon report completion, inspector and plant official should sign.
+MP 460, Condition of Container (Scoresheet)	Import product	3	Upon completion	Gov. office-copy Plant - copy	Use tightened plan for re-inspections See sec. 20.17
MP 462, Establishment Workload and Assignment Computation	Workload and assignment	3	Completed by Circuit Supervisor	Reg. office-orig. Area Sup.-Copy Gov. Office-Copy	
MP 480, Application for Approval of Label, Formulation, or Device	As required	3	By plant for each label to PLS, Wash., D.C.	By PLS: PLS-orig. IIC-copies By IIC: Gov. office-copy Plant-copy	See form * * * * *
MP 486, Net Weight Report	Net weight	1	Upon completion	Gov. office	See form
MP 490, Assignment Record	Program planning, operating, and controlling. Maintaining current assignment data	4	Completed by Area Supervisor. Orig. and copies to RD	Reg. office-orig. WSDS, Wash.,-copy Area office-copy Circ. Sup.-Copy	
MP 491, Assignment Report	Assignment	3	Completed by Area Supervisor	See form	
+MP 505, Poultry Inspection Certificate	Upon request: 1. According to 381.108. 2. In lieu of MP 506.	4	Upon completion	Shipper - orig. & 1st copy; Area office-2nd copy. Gov. office-3rd copy	See Regulations 381.108 and Manual 22.14(a)
+MP 506, Export Certificate	Export	6	Upon completion	Shipper - orig. and 1st copy. Plant - 2nd copy. DSC, Des Moines, Iowa - 3rd copy. Gov. office-4th copy. Area Sup.-5th copy	See form
+MP 508, Notice of Shipment of Material derived from United States Inspected and Passed Carcasses, but not Eligible for the mark of Inspection for Use in Certified Animal Food	Certified animal food	4	Upon completion	See form	

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Chart 20.1 - Forms, con't.

Form	Use	Copies	Submittal	Distribution	Other Information
+MP 513, Poultry Inspection Daily Summary	Summary of lot information	1	Weekly	DSC, Des Moines, Iowa	See form
+MP 514, Poultry Inspection Lot Tally Sheet	Each lot inspected	1	Upon completion of lot inspection	Gov. office	Retain in inspector's possession or in Gov. office at all times.
+MP 514-1, Poultry Condemnation Certificate	Each lot	4	Upon completion	Plant - orig. and 2 copies Gov. office-copy	See form
+MP 514-2, Poultry Lot Information	Each lot	1	After lot is packed	Gov. office	See form
+MP 519, Scoresheet for Carcass Meat and Meat Byproducts	Carcass reinspection; each lot	2	Weekly	Gov. office-original Plant-duplicate	See sec. 20.18
+MP 526, Application for Inspection Service on Poultry Products Frozen Away from Official Plant	Inspection of off-premise freezing	5	By applicant	See form	
+MP 528, Moisture Absorbed by Poultry	Chilling procedure change	2	By plant	Gov. office-orig. Plant - copy	See form
+MP 536, Monthly Report of Inspected Poultry	To report condemnations occurring before and during cutup or further proc.	2	Monthly	DSC, Des Moines - original Gov. office-copy	Report condemnations occurring after cutup or further processing under "Remarks."
+MP 549, Daily Moisture Record	Moisture control; daily	2	Weekly	Regional office-orig. Gov. office-copy	See form
+VS 1-27, Permit for Movement of Animals	Quarantined animals	See form	Upon completion	Gov. office-orig. VS (in accompanying envelope) - copy	Upon slaughter, comp. items 26-31.
+VS 1-68, Report of Brucellosis and Tuberculosis Reactors Slaughtered that are not properly identified when received	Reactors not properly identified	4	See form	See form	
+VS 2-11, Report of Diseased Animals Found at Stockyards or Slaughter Establishments	Contagious and communicable diseases	4	See form	See form	Report identity of affected animals by phone or wire, &/or this form

Chart 20.1 - Forms, con't.

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Form	Use	Copies	Submittal	Distribution	Other Information
+VS 6-35, Report of Nonreactors Showing Tuberculosis Lesions or Thoracic Granulomas	Tuberculosis or thoracic granulomas	3	See form	With sample-- Original and VSL copy. MPI copy-- file.	Case number in block #2 is numbered consecutively for each establishment, beginning with case #1 each fiscal year.
+VS 17-33 Animals Imported for Immediate Slaughter	Import cattle	1	See form	See form	See Part 21
DPSC Form 2662, Report of Nonconformance Supplies	Material rejection		By military See Subpart 20-A	See Subpart 20-A	See form

+ = Meat only

+† = Poultry only

PART 21

COOPERATION WITH OTHER AUTHORITIES (MEAT)

21.1 INSPECTION SERVICES

21.1.1 VS Form 1-1-A

21.2 COMMUNICABLE DISEASES

Communicable diseases, cysticercosis, rabies, scrapie, tuberculosis, infectious ecthyma, myiasis, and other diseases must be reported to VS. A VS inspector may examine animals with scrapie.

21.3 FOREIGN DISEASES

Foreign diseases, rinderpest, foot-and-mouth disease, contagious bovine pleuropneumonia, and Teschen's disease are not present in USA. If suspicious symptoms are observed, report to the nearest VS field veterinarian. If he cannot be reached, report to the state VS veterinarian in charge and VS.

21.4 ANIMAL IDENTIFICATION

In most cases, cattle identity is established by ear tag, sales tag, or branding. In mature cattle, hide brand may be useful. If available, hide brand should be shown with ear tag numbers on VS Form 2-11 and VS Form 1-27.

A method which will maintain carcass identity with identification (ID) tags throughout post-mortem inspection is acceptable. One successful method uses a 3-section plant tag. One section is fastened to the carcass, one to the head, and one is put in the plastic bag with all ID devices.

21.4 REPORTING PROCEDURES

(a) Communicable Diseases

By collect wire, addressed to VS veterinarian in charge of State of origin, immediately report any unusual condition suggestive of animal communicable disease.

VS Form 2-11 is used for reporting diseases other than tuberculosis.

(b) Mucosal Diseases

When mucosal disease complex conditions are observed, immediately call (collect) VS veterinarian in charge of origin State. If origin cannot be determined, notify the veterinarian in charge of the State where animals were slaughtered. Confirm telephone report with completed VS Form 2-11.

(c) Hog Cholera

Promptly report by collect call all cases of hog cholera-like symptoms or lesions to VS veterinarian in charge in the State where animals are located. The telephone report must have enough information to aid in traceback.

Swine from hog cholera quarantined areas, or those exposed to hog cholera are shipped under VS seal and accompanied by VS Form 1-27. Receiving HPI inspector will (1) remove the seal, (2) complete VS Form 1-27, and (3) send copy to State of origin VS veterinarian in charge of swine received.

When an inspector is not on duty, some shipments arriving at the official plant may need to be unloaded before an inspector is available. In this case, the inspector adds this information on back of VS 1-27, and includes swine description, number of animals, special marks, seal broken by plant employee, slaughter date, plant's name and location, and inspector's name and title.

(d) Tuberculosis

(1) **Nonreactor.** Report all non-reactor cattle and calves with lesions resembling tuberculosis and all mature cattle with thoracic granulomas, except those considered to be coccidioidomycosis found in feedlot steers and heifers, on VS Form 6-35. Report routine "passed for cooking" and condemned carcasses on a separate form in States having a swine tuberculosis program, and not on VS 6-35. Only swine having gross lesions of tuberculosis involving thoracic cavity will be reported on VS Form 6-35.

(2) **Reactor.** Do not submit lesions from reactors unless specifically requested by VS. Lesions from reactors shall be accompanied by MP Form 23.

(3) **Specimens.** Tuberculosis lesions and thoracic granulomas shall be sent to Veterinary Services Laboratory (VSL), P.O. Box 70, Ames, Iowa 50010, for diagnosis. Trim lesions free of fat, divide into blocks approximately 1/2 inch thick, and place in formalin and sodium borate solution (SBS) provided in shipping container. Minimum solution to tissue ratio is 10 to 1 for formalin, and 1 to 1 for SBS. Lesions too small to be divided shall be sent in formalin. When laboratory assistance is needed to determine cattle carcass disposition, check Item 18 on VS Form 6-35 and attach VS Form 10-23 (inside box flap) to outside of mailing box. Leave all identifying devices from each animal in plastic bag, and send to VSL in box with specimens. Do not remove sponge. When laboratory assistance is needed to determine swine carcass disposition, send specimen to MPI laboratory with MP 23.

(e) Myiasis

When animals with maggot infested wounds are observed, collect at least 10 larvae, some from deep within the wound. If larvae are of different

size or age, collect samples of each size. Put specimens in blood tubes containing alcohol as preservative and send them air mail, with completed VS Form 2-11, to Veterinary Services Laboratory, USDA, APHIS, P.O. Box 969, Mission, TX 78572.

21.5 TRANSPORT VEHICLE CLEANING

MPI personnel will supervise handling of trucks, trailers, and railroad cars used for animals affected with an infectious disease and received at federally inspected plants where VS employees are not stationed.

For cleaning and sanitizing, see regulations (9 CFR 71) and use procedures outlined below.

(a) Trucks, Trailers

Once a plant employee is instructed on procedures to follow in cleaning and disinfecting trucks, inspector does not need to supervise disinfection of every truck. However, he must assure that:

1. Trucks are properly cleaned before applying the disinfectant.
2. Spraying equipment is adequate.
3. An ample supply of a permitted disinfectant is available.
4. Mixed disinfectant is of proper strength.
5. All inner surfaces of trucks are saturated with disinfectant.

Plant employee should keep a record of cleaned trucks or trailers by recording their license numbers.

(b) Railroad cars

When a car carrying affected animals is received, the inspector shall:

1. Notify by telephone the VS Area Veterinarian and the responsible railroad official that the car must be cleaned and disinfected.

2. Where possible, arrange to supervise disinfection of all infectious cars received.

21.6 MILK TESTING (MCT)

(a) Collection

... for collecting
... federally inspected
... cattle

... cattle. The inspector

... samples from all
... including branded
... cows and bulls are
... years of age or over,
... or post-parturient cows
... old

... blood samples from bleeding
... pleaus, heart, or any
... method. About one-half
... tube of blood pro-
... not amount for laboratory

... blood sample in plastic bag
... identifying devices (including
... if any). Maintain samples
... as collected to cor-
... plant's daily kill schedule.
... samples and identifying
... appropriate laboratory.
... kill schedules. Since
... devices are submitted
... tuberculosis-like

... monitor cattle and are
... to identify MCT blood
... has provided VS Form 1-16
... identification numbers
... the MCT blood samples
... of such cattle. This
... Form 6-35 will be provided
... specimen box returned from
... laboratory.

... that samples are protected
... drying, moisture, or contamina-
... refrigerate them at 35-40° F.
... expiration.

... possible, mail blood samples
... at least every other day,
... arrangements are made for
... Franked labels, addressed to
... laboratory, are provided.

(2) Sample tubes, mailing boxes.

The State VS staff will arrange for supplying blood sample tubes, mailing boxes, franked labels, record forms and racks at each plant involved

(b) Program Operation

MCT blood samples are being collected at practically all federally inspected plants. Where not done, local VS representative and MPI area supervisor make necessary arrangements with plant to institute a program.

RD develops necessary working arrangements with all plants in his region after initial arrangements have been agreed to, and by working closely with VS Directors in their respective regions.

In these arrangements, MPI acts as an agent for VS in collecting blood samples and related activities dealing with animal disease found on post-mortem inspection. VS and MPI arrange for collecting blood samples at all plants under Federal inspection. In plants where MPI personnel are unable to collect samples, arrange through VS to have a plant employee or contract technician collect samples under MPI supervision.

21.7 IMPORTED CATTLE

Broker, commission agent, packer, or other responsible person must notify the veterinarian in charge when Canadian cattle are received at an official plant and must identify such cattle to the inspector. After slaughter, MPI will notify the VS inspector in charge at the border point of entry by using VS Form 17-33. MPI will complete this form only for animals slaughtered in federally inspected plants.

Tuberculosis. If tuberculosis lesions are found in Canadian cattle, prepare specimen and complete VS Form 6-35 and VS Form 17-33 and submit with all identifying devices to VSL, Ames, Iowa.

LIVESTOCK DIVISION

Subpart 21-B

21.10 SPECIFICATION PRODUCT

(REFERENCE CROSS UTILIZATION AGREEMENT.)

21.11 EXAMINATION SERVICE

A Product Examination Service, on fresh and frozen meat for industry's use, is available to carriers and other interested persons desiring a certification on physical characteristics of products at time of examination only. Occasionally, this determination involves a question of wholesomeness.

When AMS Meat Grading Branch asks for assistance, circuit supervisors are authorized to respond, provided the product can be identified as "U.S. Inspected and Passed." Inspector's time is billed as for specification examination work.

21.12 CARCASS EVALUATION SERVICE

Two voluntary services--(1) Beef Carcass Evaluation Service and (2) Carcass (Beef) Data Service--have been developed by AMS Livestock Division and are available to producers desiring information on carcass quality and yield grade characteristics of their cattle.

(a) Carcass Evaluation Service (Beef)

Federal meat graders may request inspectors in charge to provide service in federally inspected plants for maintaining identity of slaughtered animals with corresponding carcasses.

A backtag for identifying each live animal is issued to the applicant, or his representative, (livestock owner or broker) by a member of the Meat Grading Branch.

Backtag numbers of all animals are listed on a form--Live Cattle List--prepared in triplicate by the applicant. This form includes producer's name and address, and number of cattle involved. Before slaughter, one copy will be given to the inspector in charge, with sufficient USDA wire seals and serially numbered metal carcass tags. These metal tags bear numbers corresponding to the numbers on backtags placed on live cattle. Applying tool is provided by the Meat Grading Branch. Other identification forms--metal or plastic eartags--are also permitted.

The meat grader notifies the inspector of identification type used.

The regulations (M-310.2) require the plant to maintain all identifying tags and devices with the carcass through inspection.

The veterinary supervisor, or his assistant, supervises attachment of appropriate metal tag or other tag to leading half of the carcass. Such tag should be readily visible, be attached to the same carcass area, and remain on the carcass until the grader has identified it and has obtained the grade and other desired information.

The veterinary supervisor, or his assistant, will return the following completed certification form to the grader:

CERTIFICATION OF IDENTIFICATION TRANSFER

I, (Signature of inspector), certify that on (Date), I identified or supervised the identification of (number) carcass(es) at Establishment No. with the corresponding live animals by using one of the following positive and approved methods and notified the USDA meat grader.

Check: () USDA shield-shaped metal carcass tags.
 () USDA Carcass Data Service (Beef) eartags.
 () Other: (Specify)

Inspectors: 1. Original to the USDA meat grader.
 2. File copy in the Government office.

Note on this certificate if tags are missing and carcasses are not identified during slaughter.

(b) Carcass Data Service (Beef)

In this program, a bright orange, shield-shaped, serially numbered, plastic eartag is placed in the animal's ear. When an animal with this tag is presented for slaughter at an official plant, the inspector *(1) assures that tags are transferred from ear to carcass by plant employee and are properly attached near the chine bone, and *(2) completes the "Certification of Identification Transfer" form *(21.12(a)). Where tag transfer cannot

be done by a plant employee or MPI inspector, report such plants to FO.--*

Billing is not necessary for this service. The Meat Grading Branch records the number of cattle identified from the inspector's certification form, and reimburses MPI as agreed upon at Washington level.

OTHER PROGRAMS

Subpart 21-C

21.15 PACKERS AND STOCKYARDS ADMINISTRATION

(REFERENCE MOU BETWEEN PACKERS & STOCKYARDS AND FSIS.)

21.16 (NO LONGER NECESSARY)

21.17 (NO LONGER NECESSARY)

PART 22

EXPORT

22.1 GENERAL REQUIREMENTS

(REFERENCE FSIS DIRECTIVE 9020.1, 5/15/84.)

22.2 APPLICATION

22.3 PRODUCT REINSPECTION

(REFERENCE FSIS DIRECTIVE 9040.1, Rev. 1, 10/20/86.)

22.4 EXPORT CERTIFICATION

22.5 CONTROL OF CERTIFICATES AND STAMPS

(REFERENCE FSIS DIRECTIVE 9060.4, 11/20/84.)

22.6 NET WEIGHT

(REFERENCE FSIS DIRECTIVE 9040.1, Rev. 1, 10/20/86.)

22.7 REIMBURSABLE SERVICES

(REFERENCE FSIS DIRECTIVE 9060.4, 11/20/84.)

NOTE! DUE TO CONDENSED MATERIAL, PAGES 222, 223,
224, 225, and 226 WERE NO LONGER NECESSARY;
THEREFORE, PAGE 227 FOLLOWS THIS PAGE.

REQUIREMENTS
FOR
IMPORTING COUNTRIES

Subpart 22-B

(Regs: M-322; P-Subpart M)

All products for export shall meet the importing country's requirements. Exporters are responsible for determining that they comply with these requirements and providing the necessary documents.

22.17 ADDITIONAL REQUIREMENTS

(REFERENCE FSIS DIRECTIVE 9080.1,
9/6/84.)

22.8 PUERTO RICO

The Commonwealth of Puerto Rico is a territory of the United States and, as such, the use of PY-506, Export Certificates, is not appropriate. Puerto Rico does have specific regulations covering packaging, labeling, condition inspection, and grade requirements on poultry products. These requirements are set forth in their Market Regulation No. 8. These regulations require certification by the Poultry and Dairy Quality Division, Poultry Grading Branch. Persons desiring to ship poultry to Puerto Rico are advised to contact the nearest poultry grading office for detailed requirements for product destined for Puerto Rico.

IMPORTING COUNTRIES

Following are countries importing meat and/or poultry products from the United States, and their requirements.

22.18 AFRICA (REPUBLIC OF SOUTH)**Meat Products**

Animal Casings. Exporter must obtain a permit from the Department of Agricultural Technical Services of the Republic of South Africa. The reverse side of the veterinary health certificate will be completed by an authorized MPI veterinarian. The animal disease status in the United States is such that certification may be routinely carried out.

22.19 ALGERIA**Meat Products**

For products or casings, issue MP Form 412-11.

22.20 ARGENTINA

Export certificates shall be visaed by Argentine Consulate nearest to the plant.

(a) Meat Products

Issue MP Form 412-3.

(b) Poultry Products

Poultry must originate from plants approved by Argentine inspection officials.

The following information must be stated in Spanish on MP Form 506:

- *Official establishment number (Número oficial del establecimiento); name and
- *address of plant (denominación y
- *domicilio del establecimiento); product of USA (Producto de los Estados
- *Unidos de América);

I certify that the poultry and poultry products specified above came from birds that were officially given an ante-mortem and post-mortem inspection and passed in accordance with applicable laws and regulations of the United States Department of Agriculture and are wholesome and fit for human consumption (Certifico que la volatería y los productos de volatería especificados supra provinieron de aves que fueron sometidas oficialmente a una inspección antemortem y post-mortem y aprobadas de conformidad con las leyes y reglamentos aplicable del Departamento de Agricultura de los

Estados Unidos, siendo sanos y aptos para el consumo humano);

By order of the Secretary of Agriculture (Por resolución del Secretario de * Agricultura); and date (Fecha).

The Spanish statements are to be typed in the "remarks" block of MP Form 506. If more space is needed, use the reverse side.

22.21 AUSTRALIA**(a) Meat Products**

(1) Fresh, frozen. Fresh or frozen meat and meat products are not eligible for export.

(2) Cooked, canned. Cooked meats and cooked meat products in hermetically sealed cans may be exported. An authorized MPI veterinarian shall certify that (1) products are from animals slaughtered for human food in official U.S. establishments or approved foreign plants, (2) such animals received ante- and post-mortem veterinary inspection at time of slaughter and were free from contagious and infectious disease, and (3) products were not exposed to infection before export.

For canned product, manufacturer shall also declare that during processing all can content was heated to not less than 100° C. (212° F.). Temperature and time of process shall be endorsed by an MPI veterinarian with a certificate stating that he is familiar with product process and he does not have reason to doubt manufacturer's declaration.

(3) Casings. Issue MP Form 415-5.

Casings must be the product of and totally prepared in U.S.

(4) Inedible. Cattle hides are not permitted entry from countries with foot-and-mouth disease. They must be accompanied by a certificate from an MPI veterinarian stating that hides are from cattle slaughtered for human food.

(b) Poultry Products

(1) Canned. Only canned poultry products are eligible for export to Australia. Besides MP Form 506, a certification shall be made by manufacturer and inspector (jointly) on firm's letterhead. Such certification shall consist of:

a. A declaration by the manufacturer stating that all can content was heated to not less than 100° C. during processing. Temperature and time used shall be stated.

b. A certification by the inspector that he is familiar with product process, and does not have reason to doubt manufacturer's declaration. Inspector's part of the certificate shall read:

"I certify that I am familiar with product process (insert name of product) and I have no reason to doubt manufacturer's declaration."

John Doe
USDA Inspector

(2) Labels. Trade description shall be in the form of a principal label or brand, prominently and, as practicable as possible, permanently affixed to product. It shall contain the following prominent and legible wording:

a. Name of country where products are made or produced (Product of USA).

b. True description of product. Where any weight or quantity is declared, it shall specify whether gross or net. Any matter included on the label or brand, additional to that specified in the regulations, shall not contradict or obscure specified particulars by illustration, wording, or size of lettering.

22.22 AUSTRIA

The export certificates and any additional statements must be typed with the same typewriter and signed by the same MPI veterinarian.

(a) Meat Products

(1) Beef. Issue regular export certificate.

(2) Pork. The following statement must be typed on the export certificate for fresh/frozen pork and * tongues (livers, spleens, kidneys and * hearts are exempted from the * statement): "The whole consignment has been stored in the country of origin continuous for at least 30 days at a temperature not above minus 18 degrees (18 degrees Centigrade below zero) under the control of an official veterinarian, as a consequence of which the product is free from trichinae." Minus 18 degrees Centigrade is the same as -0.4° F. Each pork liver must be branded with the official inspection legend.

(3) Salmonellae testing. Frozen meat shipped in cuts smaller than halves for hogs, sheep and goats and smaller than quarters for cattle and horses must be tested for Salmonellae. If the Salmonellae test is not made in the country of origin, it must be carried out in Austria or in a transit country.

Five samples from 5 different pieces of meat shall be taken for Salmonellae testing from each metric ton of ready-for-shipment meat under the supervision of an official veterinarian. With the exception of the number of samples specified above, follow the instructions specified in section 22.29(b)(3) for submitting samples of meat for Salmonellae testing by a government approved laboratory.

If the Salmonellae testing has been carried out, the following statement must be typed on the export certificate: "The test for Salmonellae yielded negative results and has been conducted in conformity with Austrian requirements by the official laboratory in (City), whose Laboratory Code Number is _____ on (Date).

(4) Casings. Issue MP Form 415-5.

(5) Inedible. Inedible products * are not eligible for importation. *

(b) Poultry Products

Issue MP Form 506. The following statement shall be typed in the "remarks" section: "The undersigned certifies that the above designated product came from poultry originating in flocks in the United States which were not quarantined because of outbreaks of diseases communicable to poultry within 40 days of slaughter."

Plant management is required to identify flocks and their origin to the veterinary inspector in charge sufficiently in advance of slaughter to enable him to execute the export certificate.

* 22.22-A BAHRAIN

* (a) General Requirements.

* (1) Export guidelines. Information provided below specifies requirements currently available from Bahrain. To facilitate the completion of export requisites where current information is incomplete, U.S. exporters may wish to follow the trend toward uniform import requirements in the Gulf States by using, as guidelines, the standards set forth in Section 22 77 for Saudi Arabia.

* (2) Labeling.

* (i) Fresh/frozen. Fresh/frozen meat and poultry products must bear the following in addition to those labeling features mandatory in the U.S.:

- * 1. Bilingual labeling,
- * 2. Country of origin,
- * 3. Production date (freezing or packaging dates). Spell out or abbreviate name of month: (Jan. plus year),
- * 4. Expiration date. Spell out or abbreviate name of month: (Jan. plus year). Meat and poultry expiration time permitted: one year. Acceptable alternatives and features are:
 - * a. Printed production date followed by statement "Product good for one year from date of production".
 - * b. Stickers, if plastic wrap tears on removal.
 - * c. Ink stamp.
 - * d. Production/expiration dates required on shipping containers only for institutional packing.
 - * e. It is recommended that product arrive in Bahrain within 4 months after production date.

* (ii) Processed product. Processed product must bear the following in addition to those applicable features specified above for fresh/frozen:

- * 1. Statement of nutritional qualities of product,
- * 2. Directions for storage and preparation,
- * 3. Statement of grade or quality,
- * 4. Batch number.

(b) Certification.

(1) Export certificate. Issue MP Form 130.

(c) Islamic Requirements.

(1) Islamic Centers. Copies of the list of Islamic Centers are available from RD or ECS.

(2) Certificate of Islamic slaughter.

U.S. exporter should contact importer in Bahrain to determine whether certificate of Islamic slaughter is required on subject shipment. When required, exporter must obtain certificate from a member of an Islamic Center. The certificate must be endorsed by the U.S.-Arab Chamber of Commerce or by a Bahrain Consulate. The telephone number of the U.S.-Arab Chamber of Commerce is (202) 293-3162.

22.23 BELGIUM**(a) Meat Products**

Issue MP Form 7, Certificate of Wholesomeness, for exports of fresh meat and meat byproducts.

Issue MP Form 95 for processed meat food products.

These certificates require that ante-mortem inspection be conducted by a veterinarian. The alternative procedure in section 9.6 meets this requirement, provided a veterinarian does ante-mortem inspection of the animals whose meat, product, or byproduct is to be exported to Belgium. Exporters must establish product identity and satisfy certifying official that product meets this requirement.

Belgium import regulations apply to all meat, including horsemeat, and all processed and canned products with more than 5 percent meat by weight.

(1) Fresh, frozen. The following fresh or frozen products are eligible for entry:

a. Beef, veal, horsemeat--bone-in or boneless pieces weighing at least 3 kilos (6.6 pounds).

b. Beef or horsemeat tenderloins of any weight.

c. Pork--bone-in hams, loins, and bacon from back and breast.

d. Mutton, lamb, and goat meat--bone-in legs, shoulders, and loins.

e. Unboned heads of all species.

f. Byproduct (edible)--hearts, kidneys, livers, tongues, brains, intestines, stomachs, pancreas, and thymus. Large intestines and stomachs must be scraped and scalded.

Wrapper or container labels of byproduct, including livers, must show inspection legend.

(2) Brands. Each piece or cut of fresh meat, chilled or frozen, shall be marked with legible brands. Carcasses less than 132 pounds shall have four brands on shoulders and external surfaces of hind legs; those over 132 pounds at least four brands on each side, placed on thigh, loin, back, and

shoulder. Pork carcasses shall also be branded on ribs.

(3) Labels. Labels must be approved by SLD. One label shall be affixed outside container and one shall be placed inside. A label need not be on the container if all cans or packages therein bear identical labels.

The label shall show kind of meat, official number of processing or producing plant, and country of origin.

(4) Casings. Identify containers with inspection mark shown in the regulations (312.8). Accompany each shipment with MP Form 412-8; the words "animal casing" are substituted for "products." Nodular casings shall be described on the certificate as "Nodular (not clear)."

(b) Poultry Products

Issue MP Form 506 and MP Form 47. To comply with item (e) of MP Form 47, the owner or producer of poultry to be exported must sign a certificate stating all requirements in such item. The certificate must be given to the MPI officer signing the form. Product with bastings or tenderizers is not permitted.

22.24 CANADA**(a) General Requirements**

(1) Eligible plants. All meat and poultry plants operating under Federal inspection in the U.S. are considered as eligible to prepare products for export to Canada. Some establishments lose their eligibility to export to Canada because of deficiencies found by the Canadian officials conducting reviews. A list of U.S. establishments not eligible to prepare product for export to Canada is furnished to the RDs. An establishment may regain its eligibility after the RD has evidence that the necessary corrective action has been taken, and so notifies ECS. The RDs will notify inspection personnel and plant management of changes in the status of U.S. *

subject to exports

be signed by MPI veterinarians "D.V.M." (or equivalent degree) should be indicated after signature.

products may not be exported to Canada from an establishment which has lost its licence. Other U.S. export product labels containing meat must be dated from an establishment when that establishment was not eligible to

(ii) Weights and number of cartons.

The weights and numbers of cartons for each EST/PLANT number which appears on the product labels in each shipment must be shown on the export certificate. Reserve one line for each EST/PLANT number on export certificate which includes weight, number of cartons and product name.

(3) Export stamp. Export stamp showing certificate number must be applied to main panel of each carton.

(4) Labels, containers and markings.

(i) Approval. Before shipping, exporters shall obtain Canadian and USDA approval for all edible product labels for immediate and shipping containers by sending proof of proposed labels to:

Chief, Standards & Labels
Meat Hygiene Division
Halldon House
Agriculture Canada
2255 Carling Avenue
Ottawa, Ontario, K1A 0Y9
(Tel. No: (613) 995-5433)

For U.S. approval, labels shall be sent to SLD.

Shipping containers of imported prepackaged products that have their inner markings approved by the Canadian Label Unit will not have to be submitted to that office for approval. It will be the packer's responsibility to ensure that such cartons bear all mandatory information, i.e.:

- Product description which should be identical to the inner marking;
- Country of origin to appear immediately below product description should be at least half the height of the largest letter on main panel;
- Net quantity of the meat product;
- Packer's name and address;

1.1 Certificates

1.1.1 Signature on certificates. All accompanying product must

be signed by MPI veterinarians "D.V.M." (or equivalent degree) should be indicated after signature. Products may not be exported to Canada from an establishment which has lost its licence. Other U.S. export product labels containing meat must be dated from an establishment when that establishment was not eligible to export to Canada. Product which has been hyperchlorinated for export to Canada must be dated from the date when it has been added to the product. The amount normally added is 100 parts per million water. In the case of product is being exported, it must originate at an establishment which has been subjected to inspection and control. One manner of control would be for the inspector in charge of the establishment to receive notification from the inspector in charge of an establishment exporting product to the exporting establishment as to whether hyperchlorination is in use at the establishment. The exporting establishment would naturally have to be an eligible product from the exporting establishment. It is the responsibility of the inspector in charge of the exporting establishment to ensure that satisfactory controls are in place of their visits to the exporting establishments. Exporters will expect to see that the controls are in use and that the product is valid for export to be made. Unless the inspector in charge of the exporting establishment may lose the right to export to Canada.

e. Inspection stamp or statement; and

f. Storage instructions (Keep Refrigerated or Keep Frozen).

Shipping cartons for bulk packed products such as boneless beef must be submitted to the above address for approval in the usual manner.

(ii) Prepackaged product. All consumer-size packages of meat and poultry products must comply with the following:

a. The product name, ingredients statement and net weight must be shown in both English and French.

b. Net weight must be declared in metric units. Canada will continue to approve labels with net weights in both metric and avoirdupois units.

c. The name and address of the manufacturer or first dealer ending with U.S.A. must be shown on the main panel with all mandatory requirements. The first dealer must either be a registered tenant of a USDA inspected plant or a Canadian distributor.

* (iii) Quebec requirement. A Quebec provincial "Order-in-Council" (4-15-67) requires "French" on labels of products marketed in the Province. Inscriptions in another language must not precede those in French. The Order requires that food labels show:

a. Product nature, composition, use, exact quantity, origin, etc.

b. Identity of manufacturer, preparer, conditioner, or processor.

c. Place of manufacture, preparation, conditioning, or processing of product. Imported product must be marked with the country of origin name.

* (iv) Filing of approved labels. The MPI inspector shall file approved Canadian labels in the plant for which label was approved.

(v) Approved labels at delisted plants. Lists of approved Canadian labels will be amended to indicate temporary withdrawal of all labels and markings for those U.S. establishments which have remained delisted for export to Canada, for a period exceeding 12 months. Upon relisting of such an establishment, a delay of 4 weeks should be allowed before shipments are made.

Upon relisting of establishments which have remained delisted for a period exceeding 24 months, all labels and markings will have to be resubmitted to Canada for approval.

(vi) Container and markings. Bulk product - primal cuts such as pork hams, skinless pork bellies, etc., must be individually stamped with the USDA inspection legend.

The use of combo bins for export of frozen meat cuts is not permitted. Combo bins with fresh meat cuts must be consigned directly to Federal registered establishments and not to storages. Combo bins or cartons must have the mandatory information printed on one main panel except the product name can be either printed, rubber stamped, stencilled, or applied by means of a pressure-sensitive sticker.

Frozen cuts will be permitted entry only in properly packaged shipping cartons. Truckload or carload lots of dressed hogs may be identified by means of a placard marking. Each hog carcass side must bear three inspection legend brands. Beef quarters must bear at least an inspection legend and a shipping tag. Both skin-on and skinned calf carcasses must also bear a shipping tag. Such tags must bear mandatory information on one side and be stamped with the export stamp on the other side.

Carload lots of shortening, lard, or tallow must be identified by a placard and be consigned directly to a registered plant in Canada operating under the Canada Meat Inspection Act and Regulations.

... information must appear on the original foreign inspection certificate. Canada will not accept such product accompanied by U.S. export certificates, unless they grant a waiver for the foreign inspection certificate on an individual case basis. Products originating from approved plants in the following countries are permitted entry into Canada: Argentina, Australia, Brazil, China (Peoples' Republic of), Czechoslovakia, Denmark, France, Germany (Federal Republic of), Honduras, Hungary, Ireland, Paraguay, Uruguay, Poland, Romania, Switzerland, and Yugoslavia.

... address of the dealer end-... on the main... requirements. ... either be a reg-... IADA inspected... distributor. In... distributor, ... by the ... description of ... species must be ... name.

... "USA" immediately ... Usually, ... at least half ... used in product ...

... The word "weight" ... in full, if used. ... is acceptable for ... Associated ... are to be used ... words "net weight"

... information must appear on the original foreign inspection certificate. Canada will not accept such product accompanied by U.S. export certificates, unless they grant a waiver for the foreign inspection certificate on an individual case basis. Products originating from approved plants in the following countries are permitted entry into Canada: Argentina, Australia, Brazil, China (Peoples' Republic of), Czechoslovakia, Denmark, France, Germany (Federal Republic of), Honduras, Hungary, Ireland, Paraguay, Uruguay, Poland, Romania, Switzerland, and Yugoslavia.

(3) Descriptive terms. Descriptive terms applied to meat or meat product must be consistent with Canadian Food and Drug Regulations, and its Meat Inspection Regulations.

(4) Eligible product.

(i) Carcass. Carcasses, sides, or quarters must be intact. Those with trimmed areas, severed joints, missing parts, and removed peritoneum, pleura, or body lymph nodes are unacceptable.

(ii) Beef hearts. Make at least four incisions in the interventricular septum and inner surfaces of the heart, as part of the post-mortem procedure for cysticercus bovis inspection. The auricles must be removed.

(iii) Livers.

a. Whole livers shall have hepatic lymph nodes intact.

b. Skinned, deveined livers without hepatic lymph nodes prepared for subsequent slicing in Canada will be permitted entry only into a registered establishment.

c. Sliced livers in consumer-size packages are accepted without hepatic lymph nodes.

(iv) Spleens, lungs, udders, etc. Spleens, lungs, udders, mucous membranes, and parotid salivary glands are prohibited in meat food products.

Meat Products

Export Certificate If product is from plant other than the ... statement on ... should say "products ... no ... plant's est no. ... of chlorine to ... reasons other than pot- ... prohibited by Canadian reg- ... following statement must ... on the export certificate: ... meat products contained ... have not been sub- ... hyperchlorinated water." ... prime steam lard and ... require this statement.

Imported Meat Meat and poultry ... to the U.S. which has not ... processed in this country ... for export to Canada

(v) Sausage. Antioxidants are not permitted in sausage. Soya and other extenders are permitted, but products containing them must be labeled as extended meat products. Extenders must be nutritionally equivalent to the meat they replace, must meet all the requirements of the Canadian Food and Drug Regulations, and be approved by the Canadian Meat Inspection Division. Exporters may contact this Division for details.

(vi) Casings. MP Form 415-5 must contain the following information: Establishment number, species (beef, lamb, hog), "graded" (or "ungraded"), and an impression of the export stamp should be stamped on the reverse. Certify only casings prepared under full-time inspection.

Since the MP Form 415-5 does not have a serial number, use the date the form is signed, e.g., May 15, 1982, would appear as 051582.

The terms "graded" or "ungraded" are required by Canadian Customs. The term "graded" should be used when the casings have been sized according to plant management's specifications. If the casings have not been sized the term "ungraded" should be used.

Casings originating in U.S. and shipped to other countries for processing, or casings from countries other than Australia and New Zealand, are not eligible.

Casing plants located outside official plants may apply for reimbursable service under Part 350 of the regulations. The inspector will certify only casings originating in official plants and processed under his supervision.

(5) Prohibited importation. The following importations are prohibited.

- a. Meat from boars.
- b. Meat trimmings too small to permit adequate inspection. Individual pieces must not be less than the size of a 2" cube or equivalent.

c. Pork skins (attached and detached) with black hair roots.

d. Product with freezer burns or areas of dehydration.

e. Artificially colored product.

f. Meat inspected or identified under Part 350 of the regulations.

g. Meat and poultry products other than lard and tallow which have been subjected to hyperchlorinated water.

(c) Poultry Products

(1) Certification. Issue export certificate. *

* * *

(i) Chlorinated water. Since the addition of chlorine to water for reasons other than potability is prohibited by Canadian regulations, the following statement must be typed on the export certificate: "The poultry contained in this shipment has not been subjected to chlorine disinfection as permitted by U.S. regulations (381.91(b)(1)), nor has it been chilled in hyperchlorinated water." *

(2) Kidney removal. A certification statement for kidney removal is no longer required. However, carcasses or parts of poultry other than broiler and roaster chickens must not contain kidneys at the time of export to Canada. Furthermore, mechanically separated poultry meat from any species shall not contain kidneys, if it is produced for Canada. *

(3) Containers. When poultry is processed with kidneys removed, containers should be clearly marked by lot number, or by other acceptable means to be readily identifiable when shipped. Record all marks (or lot numbers) placed on containers. Also record where and when poultry was stored, and name of inspector present during the procedure.

Firms processing poultry with kidneys removed should be encouraged to include the words "kidneys removed" on printed labels. When packages are not so labeled, the inspector shall

to assure that
need even when
defrosting is

8. A statement indicating "for further processing," if applicable.
9. "Keep refrigerated," or "Keep frozen," whichever is applicable.

Shipping container. Poultry
see 22.24(a)(4)(i).

Shipping container. Poultry
in cartons with
holes are not
on main panel
must include:
name and address of
first dealer, followed
first dealer may be a
of a USDA inspected
distributor.

legend showing
number
product and number of
shipping container.
of country of

"Product of USA" under
product
"Net Weight," followed
lbs), "oz", "kg", or
symbols not to be
or period.
USDA inspected for
official inspection

(iii) U.S. trade requirement. Boxes
printed for U.S. trade requirements
are satisfactory, provided printing
size is in reasonable relation to box
size. Requirements in Canadian
poultry regulations are recommended as
a guide. Mandatory requirements must
be printed on the box.

Main panel--items to be printed:

1. Name and address of plant.
2. "Net Weight."
3. "Product of USA."
4. "USDA inspected for wholesomeness official inspection mark."

The following items may be
stencilled or stamped on main panel of
shipping container:

1. Name of product and number of birds in the box.
2. Grade mark.
3. Plant number. If plant number included in the "USDA inspected for wholesomeness official inspection mark" is of sufficient size to be easily read, it will suffice; otherwise, it may be stencilled or stamped near the official inspection mark elsewhere on the panel.

Name & Address of Firm,
Including Country of Origin,
e.g., "U.S.A."

(Kind Name)
PRODUCT OF U.S.A.
USDA Grade Shield

FOR FURTHER PROCESSING (when required)

NET WEIGHT - LBS

Figure 22.1 - Shipping container

4. When product is for further processing, it shall be indicated on the box panel. Poultry product for further processing may be exported only to a registered establishment in Canada; not to storage nor to a retail outlet. Individual cartons of such product intended for further processing are to be sealed by tape or straps, or the truck must be sealed with an official USDA seal. Seals may be broken only by a health of animals inspector or by a person authorized by him at the final destination (registered establishment).

(iv) Utility grade poultry. When grading and labeling "utility" grade poultry for export to Canada, grade will be shown as "grade utility" in letters at least $\frac{1}{2}$ inch, with the phrase "for further processing" shown directly below the grade.

Shipping container. Shipping container will be stamped with export stamp and USDA grade utility stamp. These stamp impressions shall be on left side or lower part of label.

Ready-to-cook. Grade utility specifications for ready-to-cook stewing hens (not fowl), chickens, and turkeys will be used only when grading ready-to-cook poultry for export to Canada.

(v) Box-packed poultry. Figure 22.1 shows a sample of shipping container markings for box-packed poultry and poultry products to Canada.

Size of letters in kind name "for further processing (when required)" and grade letter--at least $\frac{1}{2}$ inch.

Size of letters in net weight--at least $\frac{1}{4}$ inch.

Size of letters in "Product of USA"--not less than $\frac{1}{2}$ the size of letters in kind name.

Kind Name:

chickens young ducks
chicken capons mature ducks
stewing hens young geese
young turkeys mature geese
mature turkeys

NOTE: "Chicken capons" may be used to describe only carcass of male chickens desexed by mechanical removal of testicles.

(vi) Pliofilm bags. They must be clear (semiopaque bags are not acceptable) and show:

1. Name and address of the manufacturer or first dealer, followed by "U.S.A.". The first dealer may be either a registered tenant of an official establishment or a Canadian distributor. If first dealer, the words "prepared for" must be used. Address may be the local or head office followed by "U.S.A.". If head office, it must be so stated.

2. Name of product.

3. Official U.S. Grade Mark.

4. "Product of U.S.A." shown clearly and boldly with letters at least $\frac{1}{2}$ the height of the tallest letter in the product name.

5. Official inspection mark.

6. Net weight.

7. Plant number as part of the inspection legend is acceptable.

Exporters must submit bags to Canadian authorities for label approval.

(5) Processed product; phosphates. *
Canadian regulations have no provisions for addition of phosphates to manufactured poultry products. Thus, products with phosphates shall not be certified and exported to Canada.

(d) Products Not For Human Consumption *

(1) U.S. edible product for animal food. *
Certain products classified as edible in U.S. but inedible in Canada, *
e.g., spleens, udders, etc., may be *
exported with edible certification *
provided shipment consigned directly *
to Canadian pet food manufacturer. *
The statement "For Animal Food - For *
Export To Canada" should be placed on *
the certificate. *

6. Plant number without inspection legend. (DO NOT USE "Establishment" in relation to number)

7. "Keep Refrigerated" or "Keep Frozen."

Items 1, 2, and 3 above shall appear in this same particular order. Exporters may modify existing cartons by use of stickers, rubber stamps or stencils. Products which are not marked as specified above will be refused entry.

(ii) Poultry offal, heads and feet. Ground, washed poultry offal, heads and feet may be exported for use in pet food manufacture provided the offal, heads and feet are derived from poultry which have passed ante-mortem and post-mortem inspection. Only establishments which remove heads and feet after completion of post-mortem inspection would be eligible to export poultry heads and feet to Canada. When above conditions are met, the inspector can issue an inedible certificate (Chart 22.3) in quadruplicate. Two copies are given to the packer, one copy is sent to the regional office, and one is filed in the inspector's office.

(3) Pharmaceutical products. Only organs saved from inspected and passed animals may be exported to Canada for pharmaceutical use. A certificate prepared on USDA/FSIS letterhead is required: Est. No. _____ Place _____ Date _____ Name and address of consignor _____ Name and address of consignee _____ Name of carrier _____ I, (Name of MPI Veterinarian), hereby certify that the following described shipment consists of products which were obtained from animals that have received ante- and post-mortem veterinary examination and that they have been handled and prepared in a manner permitted by the regulations of the Federal Meat Inspection Act of the United States. These products are intended for pharmaceutical use only.

(3) Pharmaceutical products. Only organs saved from inspected and passed animals may be exported to Canada for pharmaceutical use. A certificate prepared on USDA/FSIS letterhead is required: Est. No. _____ Place _____ Date _____ Name and address of consignor _____ Name and address of consignee _____ Name of carrier _____ I, (Name of MPI Veterinarian), hereby certify that the following described shipment consists of products which were obtained from animals that have received ante- and post-mortem veterinary examination and that they have been handled and prepared in a manner permitted by the regulations of the Federal Meat Inspection Act of the United States. These products are intended for pharmaceutical use only.

inertible products may be exported to Canada. However, must bear the following information in both English and accurate name of characterized Pork for Human consumption. Inedible - Animal Food to that effect. Declaration. Name and address, or of receiving Canadian

(3) Pharmaceutical products. Only organs saved from inspected and passed animals may be exported to Canada for pharmaceutical use. A certificate prepared on USDA/FSIS letterhead is required: Est. No. _____ Place _____ Date _____ Name and address of consignor _____ Name and address of consignee _____ Name of carrier _____ I, (Name of MPI Veterinarian), hereby certify that the following described shipment consists of products which were obtained from animals that have received ante- and post-mortem veterinary examination and that they have been handled and prepared in a manner permitted by the regulations of the Federal Meat Inspection Act of the United States. These products are intended for pharmaceutical use only.

Number of packages _____
Net weight _____
t Description _____
Shipping marks _____

Veterinarian under authority of the
Federal Meat Inspection Act of the
United States.

- * (4) Feathermeal. When feathermeal produced in an official plant is offered for export, the exporter shall apply to VS for inspection under Certification Service for inedible animal byproducts. At VS request, MPI will do such inspection on reimbursable basis.

The following certification is required:

(i) Exporter. He shall certify that (1) product was subjected to a combined heat treatment of not less than 210° F. for at least 3 hours, and 230° F. for 30 minutes; (2) the shipment originates in and is shipped directly from USA; and (3) product is in new bags (for shipments other than bulk).

(ii) Inspector. He shall make the following statement on a letterhead type certificate:

"This product is from a federally inspected plant with facilities to process product as described in the shipper's declaration."

Charges for service should be billed to VS.

NOTE! DUE TO CONDENSED MATERIAL, PAGE 240 WAS NO LONGER
NECESSARY; THEREFORE, PAGE 241 FOLLOWS THIS PAGE.

Chart 22.3 - Certificate for inedible product

UNITED STATES DEPARTMENT OF AGRICULTURE Food Safety and Inspection Service MEAT AND POULTRY INSPECTION PROGRAM WASHINGTON, D. C. 20250	
Date _____	
Plant _____	Place _____ Date _____
Name and Address of Consignor _____	
Name and Address of Consignee _____	
I, _____ hereby certify that the following described shipment consists of products which were obtained from poultry carcasses that received ante-mortem and post-mortem veterinary examination and were found to be free of diseases and/or conditions which would render the product unfit and that they have been handled and prepared in a clean and sanitary manner under the Poultry Products Inspection Act and regulations of the United States.	
Kind of Product and Denaturant	Amount and Weight
_____	_____
_____	_____
_____	_____
Shipping Marks _____	
Inspector's Signature _____	

22.25 CHILE

Poultry Products

Form MP Form 506. The following statement shall be placed on departmental letterhead and attached to the export certificate:

This will certify that a lot of approximately _____ (pounds) of _____ (kind of poultry) covered by U. S. certificate number _____ has been processed under strict sanitary conditions and was inspected for wholesomeness by the United States Department of Agriculture at time of slaughter. This inspection was carried out under the supervision of Federal veterinarians and each carcass, including its organs, was passed and certified as being free from evidence of communicable disease and is otherwise wholesome, sound, healthful, clean, and fit for human food."

Official Veterinarian

22.26 CHINA, REPUBLIC OF (TAIWAN)

Importers in Taiwan are issued licenses for each type of product they

wish to import. Certain products are subject to embargoes from time to time. U.S. exporters are advised to obtain detailed information from their buyers before making shipments.

(a) Meat Products

* (1) Eligible importation. Eligible
* for entry are fresh (chilled or
* frozen) beef, pork, lamb, goat meat,
* equine meat, and certain prepared
* products, nuchal ligaments, scalded
* and unscalded beef or lamb tripe (see
* section 22.17 (b)). Items subject to
* a temporary embargo include beef and
* swine offals, heads, tongues, ~~and~~
* tails, and feet of all species,
* certain smoked, dried or salted offals
* and bone-in meats.

* (2) Certification of fresh beef.

* In addition to MP Form 412-3 issue
* MP Form 412-13. Type the word
* "modified" above (Certificate for
* Export to Japan) and the words "Issued
* for Export to Taiwan" below (Certificate for Export to Japan). The
* remainder of the form should be completed according to instructions for export to Japan in section 22.51.

(b) Poultry Products

Certain prepared poultry products are eligible for entry. Ineligible poultry products include poultry livers, heads, and feet.

(c) Casings

Certain export certificates, i.e., MP Form 415-5, do not have an official seal. When such certificates are used, the inspector shall stamp them with the official export inspection stamp as shown in section 312.8 of the Regulations. Since these certificates do not have serial numbers, that space on the stamp shall be left blank.

22.27 COLOMBIA

Meat Products

Lard. Issue MP Form 412-7 in five

copies. Fifth copy is for inspector's file.

Certificate should be visaed by consul of that country.

22.28 CZECHOSLOVAKIA

Meat Products

Lard. The following certification, on reverse of regular export certificate or on departmental letterhead stationery, may accompany lard:

1. Originates from hogs found to be healthy before, during, and after slaughter, and that the meat, including fat, is suitable for human consumption without restriction.

2. Antioxidants were not used in producing lard.

22.29 DENMARK

(a) Plant Approval

Only meat plants approved for export to the United Kingdom and/or to West Germany are eligible for exporting meat and meat products to Denmark.

Fresh poultry is not eligible for export to Denmark. All poultry (i.e., cooked, etc.) exported to Denmark must originate only from plants certified as meeting European Economic Community (EEC) requirements. In certifying such plants, RD will apply the same criteria used in certifying poultry plants to export to West Germany. (Those establishments which export poultry to West Germany are certified as meeting EEC requirements.)

(b) Meat Products

(1) Fresh. Pork is not eligible for export to Denmark. Meat of ruminants (cattle, sheep, and goats) may be exported if accompanied by the following certification: 1. Type the following statement on the reverse of MP Form 412-3: "This is to certify

Part 22

... described on this
... processed in an offi-
... establishment certified for
... United Kingdom and/or
... Republic of Germany."

... following on USDA/FSQS
... statement, signed by an
... veterinarian, and attach to the
... MP Form 412-3

I hereby certify that

... described herein is de-
... animals which were located
... United States, Canada or Mexico
... 3-month period preceding
... export (or since birth for
... less than 3 months old).

... animals were from an area
... diameter of 20 km within which,
... to official findings, there
... occurrence of infectious
... diseases during a period of
... 30 days prior to shipment.

... areas from which the animals
... have been free of rinder-
... foot-and-mouth disease of the
... type for the last 12
... months, and the animals have not been
... vaccinated against these diseases.

... the animals from which the here-
... described meat was derived were
... slaughtered at official establish-
... (a) no

... the meat was cut up at official
... establishment(s) no. _____, and was
... prepared and packed at a temperature
... not exceeding 10° C. (50° F.).

... neither the animals nor the meat
... treated with chemical substances
... in any other way that would repre-
... sent a health hazard to the consumers.

... Processing, packaging, and ship-
... ment of the meat has taken place in a
... hygienic fashion.

... Plant management must identify to
... the MPI veterinarian the origin of
... cattle from which the meat will be
... derived for export to Denmark, to
... enable him to provide the certifica-
... tions in items a and b.

* * *

Item b refers to tuberculosis and

brucellosis. Inspectors in charge
must contact the nearest VS office to
be certain cattle to be slaughtered
are not from areas quarantined for
these diseases.

Item 1 does not refer to DES; in-
spection and passed meat from any cer-
tified establishment will qualify
under this item.

To facilitate exports to Denmark,
inspectors in charge should assure
that the regular and the supplemental
certificates are signed by the same
MPI veterinarian, and the serial num-
ber of MP Form 412-3 is typed on the
supplemental certificate.

(2) Processed. For shell stable,
canned, and other hermetically sealed
products issue MP Form 412-3. For
other cooked meat products the follow-
ing statement must be typed on the
reverse of MP Form 412-3.

a. I certify that the meat des-
cribed herein is derived from animals
which are of United States, Canadian,
or Mexican origin, were slaughtered in
an approved export slaughterhouse in
the United States, and were found on
ante- and post-mortem inspection to be
healthy and fit for human consumption.

b. I further certify that the meat
was cut and packed in an approved ex-
port cutting plant at a temperature
not exceeding 10° C. (50° F.) and ex-
posed to heat treatment bringing a
temperature of at least 75° C. (167°
F.) throughout the products.

The face of the certificate and the
supplemental statements must be signed
by the same MPI veterinarian. Type
name under signature. Indicate pro-
fessional degree (D.V.M. or other).

(3) Horsemeat. All shipments of
horsemeat and horsemeat byproduct to
be exported to Denmark must be certi-
fied as having been tested for *Salmon-
ellae* with negative results. Horse-
meat establishments and exporters must
arrange for *Salmonellae* testing by a
private laboratory and for recognition

laboratory by the Microbiology FSQS. Laboratory management must contact the Director, Microbiology, FSQS, Room 602, Agriculture Annex Building, Washington, DC Telephone (202) 447-4212. When an export license is granted, the inspector (IIC) of horsemeat establishments will be so advised by FPS. The inspector will randomly select 15 establishments for approved private laboratory. 15 duplicate samples for Food Microbiology Laboratory, Bldg. 322, College Park, MD from each proposed establishment of 40,000 pounds or less. Each sample should weigh 1/4 to 1/2 pound. The approved laboratory will analyze 25-gram portions of each sample for Salmonellae, following the method outlined in the Microbiological Laboratory Guidebook. This may be a composite test (375 gram composite for each sample may be analyzed individually). A copy of the sample analysis will be mailed directly to the establishment. In the case of frozen cartons, if it is suggested that samples be drawn before the product is opened. Laboratory fees and cost of analysis must be borne by the exporter or establishment. Mailing charges will be furnished by the establishment. The time required to analyze and prepare samples and to prepare for pre-shipment certification is a valuable service for which charges are made under Part 350 of the Federal Food, Drug, and Cosmetic Act. Poultry Inspection Regulation section 26.2 of the Meat and Poultry Inspection Manual. Since no tolerance has been established for Salmonellae, all samples must show negative results. The statement must be typed on the reverse of the export certificate (414-3):

"I certify that 15 samples of the meat/byproduct described herein have been tested for Salmonella bacteria and all results are negative."

Signature of Official Veterinarian

Name and Title ."

(4) Product not for human food. Animal organs intended for pharmaceutical use may be exported to Denmark under certification on USDA/FSQS letterhead stationery, as follows:

To Whom It May Concern:

I, the undersigned, certify that the (description of product, including animal species) originating from (name and address of supplier), USA, were obtained from animals which have passed ante- and post-mortem inspection, and furthermore, the abattoir from which these (description of product) were obtained was and is under continuous inspection of the U.S. Department of Agriculture. This certificate covers (number of cartons and weight.)

Signature, Authorized Government Veterinarian

Name and Title

Date

Cartons should be marked (printed cartons, or glued-on label) as follows: "For Pharmaceutical or Technical Purposes," description of product including species from which derived, weight, "Not Intended for Human Consumption," name and address of supplier, and name and address of recipient.

(c) Poultry Products

Fresh poultry is not eligible for export to Denmark. Cooked poultry products may be exported, provided:

1. They are packed in containers bearing official inspection mark.
2. Each shipment is accompanied by a health certificate signed by an MPI veterinarian stating:

a. The product described herein was produced under official inspection.

b. Only (species) meat was used in the product which was from birds examined under official inspection before

and after slaughter and were found suitable for human food.

c. The product has been heated to an internal temperature of at least 75° C. (167° F.) and does not contain additives not permitted under Danish legislation.

d. Neither the birds nor the meat, in accordance with U.S. legislation, has been treated with chemical or biological substances, or in any other way which could represent a health hazard to consumers.

e. This is to certify that the product described on this certificate was processed in an official U.S. establishment certified for export to the Federal Republic of Germany and/or the United Kingdom.

Item d can be routinely certified on the basis that all products must be safe for human health to meet U.S. standards.

The above certification statements are to be typed in the "remarks" block of MP Form 130. If more space is needed, use the reverse side.

Danish officials will accept poultry products cooked to an internal temperature of 160° F., as required by regulations (381.150). Research has proven that when cooked poultry is removed from the cooker at 160° F., its internal temperature continues to rise for several minutes and then drops very slowly to room temperature. Therefore, the above certification can be made on this basis.

The following additives, normally used in the United States, are permitted by Danish legislation in the amounts shown:

Butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), propyl gallate-----	50 mg/Kg
Citric acid, monoisopropyl citrate, monoglyceride citrate-----	50 mg/Kg
Algin, carrageenan, carboxymethyl, cellulose (cellulose gum), vegetable gums, methyl cellulose-----	5 gm/Kg
Anatto-----	20 mg/Kg
Carotene -----	50 mg/Kg
Nitrites-----	150 mg/Kg

Ascorbic acid, sodium ascorbate -----	500 mg/K
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Acetylated monoglycerides, diacety, tartaric acid esters of mono- and diglycerides, mono- and diglyceride (glycerol palmitate, etc.)----	5 gm/K
--	--------

Disodium inosinate, disodium guanylate-----	50 mg/K
---	---------

Monosodium glutamate-----	3 gm/K
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Phosphates listed in section 381.14 (f)(3) of the poultry inspection regulations-----	5 gm/K
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(d) Personal Consumption

Only processed meat and poultry products in reasonable quantities for personal consumption may be brought into Denmark by tourists and other without export certificate.

22.30 DOMINICA

Issue MP Form 130 for meat for poultry products.

22.31 DOMINICAN REPUBLIC

(a) Meat Products

Export certificate to be visaed by consul of that country.

(b) Poultry Products

Official certification is required on MP Form 130 stating that product is Grade "B" or better, and has been under refrigeration for not more than 4 months.

22.31-A EUROPEAN ECONOMIC COMMUNITY (EEC)

(a) Plant Approval Requirements

(1) General. The following requirements must be met in both meat and poultry plants:

a. Handwashing facilities throughout the plant must be other than hand operated and supplied with hot or cold water.

b. Sanitizers, with a water temperature not less than 180° F., must be conveniently located where hand tools are used.

c. Employee welfare facilities must include lockers (or alternate devices for storing employee's outer garments) and showers. Separate dining facilities should be provided.

d. Toilet rooms must not open directly into work rooms.

e. Acceptable work habits must be encouraged for personnel; e.g., hands should be washed before starting work; protective clothing and equipment should not be taken into toilet rooms; clothing and hand tools should not be placed on product or working surfaces during breaks.

f. Product containers must not come in direct contact with floor surfaces.

g. Final packaging operations must be so situated as to prevent risk of contamination.

h. The use of wood, e.g., wooden-handled tools, brooms, pallets, etc., in unprotected cooked product areas is not allowed and the plant must have a program to eliminate wood from unprotected raw product areas.

i. Reuse of shipping containers; e.g., heavily waxed cardboard cartons, are not permitted for product which may eventually be destined for an EEC country.

j. The walls must be smooth with angles and corners that are readily cleanable.

k. Workers must wear protective clothing, including head covering and water resistant footwear. Exposed street clothing is not acceptable.

(2) Meat plants.

a. A separate room or area be provided for flushing, cleaning, and separating stomachs and intestines. If this operation is not separate from the slaughter area, provisions must be made for effectively confining wastes and splash from other operations by such means as partial partitions, separate drainage, etc.

(3) Poultry plants.

a. Poultry crates for live birds must be constructed of water impervious material (wood unacceptable) and must be cleaned each time they are emptied.

b. Pre-slaughter stunning is required (an exception is permitted for religious purposes).

c. Handwashing facility is required in hanging area.

d. The stunning and bleeding area must be separated from the hang-on bay for live birds.

e. Handwashing facility and sanitizer is required in bleeding area.

f. Cutting/deboning operations must be physically separated (by a wall or solid partition extending from floor to ceiling) from eviscerating, giblet processing and immersion chilling operations.

g. Immersion chilling or carcasses must comply with the following:

1. Immersion chilling system shall be a true counterflow, that is, carcasses must move through the chiller against the flow of the water.

2. Potable water shall enter the carcass exit end and overflow at the carcass entrance end of chiller.

3. The carcasses must pass through one or more tanks of water or of ice and water the contents of which are continuously renewed. Only the system whereby the carcasses are constantly propelled by mechanical means through a counterflow of water is acceptable.

4. There shall be two temperature recording devices for recording the chill media temperature, one at the carcass entry end and one at the carcass exit end of the chiller. The chill media temperature shall not exceed 61° F. at the carcass exit end.

5. There shall be a water meter on the chilling system and a water meter on the final washer.

6. Listed below is the amount of water required per bird:

Washer	Chiller	Bird Size	RTC
0.40 gal.	0.65 gal.	Up to 5.5 lbs.	
0.65 gal.	1.00 gal.	5.5 to 11 lbs.	
0.90 gal.	1.50 gal.	Over 11 lbs.	

7. Water requirements for final washer are calculated and recorded in the same manner as presently done for the chiller.

8. Since poultry slaughter plants may have to alter their operating

practices when producing product for the EEC, it will be necessary that plant officials notify inspection personnel in advance of producing product for export to the EEC or for cutup at another certified plant. Plant officials at the slaughter plant must also identify and ship the product to the cutup plant in a manner acceptable to the IIC. The

- * alterations should include a check
- * to see that metering devices are
- * functioning properly and that a
- * record of the water usage is
- * maintained.

- * 9. Slaughter plants may wish to look into utilizing a procedure whereby clean eviscerated poultry is cut or boned in the hot state without subjecting it to immersion chilling. Movement of poultry carcasses direct from slaughter line to cutting room for immediate cutup, packaging, and subsequent chilling is acceptable. Slaughter plants also may wish to consider cooking whole birds, parts or boneless poultry immediately after post-mortem inspection in lieu of immersion chilling.

22.32 Egypt, (ARAB REPUBLIC OF)

(a) General Requirements.

(1) Labeling. Meat and poultry products (including canned) must bear the following in addition to required label features:

- a. Bilingual labels,
- b. Statement of Islamic slaughter,
- c. Production date (slaughter, packaging or freezing dates). Spell out or abbreviate name of month: (Jan. plus year),
- d. Expiration date. Spell out or abbreviate name of month plus year,
- e. Metric net weights. Lettering and numbers for unit metric weight must also be in Arabic.

(2) Product arrival and expiration dates.

(i) Meat. Frozen meat (including beef and sheep livers) must be shipped from the U.S. within 2 months of production date. The bill of lading will be used to confirm the date of

shipping. There is no fixed expiration date on meat products. One year is suggested as a reasonable expiration date. Livers must have lymph nodes attached.

(ii) Poultry. Frozen poultry must be shipped from the U.S. within 2 months of production date, arrive in Egypt within 3 months of production date, with an expiration date within 9 months from production date. The same time restrictions apply to poultry giblets.

(b) Certification.

(1) Export certificate. Before issuing the MP Form 130 covering product to be shipped to Egypt, inspectors must read the specifications to assure that all FSIS certifications set forth in the bids are met. Exporters wishing to certify special characteristics of product such as types of pack or cut, weight range of product, quality, type etc., to satisfy supplier-purchaser agreements or specifications, may obtain such certification on a reimbursable basis from the USDA, AMS grading services.

(c) Islamic Requirements.

(1) Islamic Centers. Copies of the list of Islamic Centers are available from RD or ECS.

(2) Certificate of Islamic Slaughter. In addition to FSIS certification, the exporter must obtain a certificate of Islamic slaughter from a member of an Islamic Center. The certificate must be endorsed by the U.S.-Arab Chamber of Commerce or by an Egyptian consulate. The telephone number of the U.S.-Arab Chamber of Commerce is (202) 293-3162.

(d) Egyptian Import Inspection.

(1) Laboratory sampling. Random samples for Salmonellae are collected on meat and poultry product entering Egypt. Beef is accepted when 1 percent or less of the samples are positive. Poultry is accepted when

20 percent or less of the samples are positive. Country of origin tests, prior to shipment, are not honored by Egypt.

(2) **Moisture control.** Poultry drip requirements are 6 percent calculated on basis of purge after thawing.

22.33 EQUADOR

Meat Products

Certificate to be visaed by consul of that country.

22.34 FIJI

Poultry Products

Cooked poultry meat may be exported to Fiji under certification similar to that required for New Zealand (section 22.66(b)). The supplementary certification statement required by New Zealand will suffice for Fiji.

Fiji authorities request that U.S. poultry plants interested in the market send small experimental shipments at first.

22.35 FRANCE

(a) Meat Products

Issue MP Form 412-11 and MP Form 81 for fresh/frozen meats and meat byproducts. Item II of MP Form 412-11, "Address of the Approved Slaughterhouse or Houses," should show the plant where product was last handled or packed.

(1) **Whole livers.** Beef and sheep livers must be inspected according to the procedure required on beef and sheep livers for West Germany (see figure 22.2). Whole skinned and de-veined livers are also acceptable if suitably and individually packed, i.e., vacuum packed, shrink packed, etc.

(2) **Skinned, trimmed, and sliced beef liver.** The transverse incisions described above are not required for

beef livers which will be skinned, trimmed and sliced.

(3) **Branding.** Organs such as livers, tongues, hearts, etc., from swine, sheep, or goats need not be branded. Boneless or bone-in meat cuts weighing more than 6½ pounds must be branded.

(4) **Freezing.** Meats must be frozen and stored at temperatures no higher than -10° C. (+ 14° F.). Meat byproducts must be frozen and stored at temperatures no higher than -12° C. (+10.4° F.).

(i) **Freezing dates.** They must be:
a. Stamped on outside labels (sec. 22.35 (a)(8)).

b. Followed by "C" if the product has been frozen once, or by "T" if the product has been thawed and refrozen.

c. Shown on MP Form 81. If the freezing dates vary, enter the first and last dates. The month may be spelled out or abbreviated, but it must not be shown numerically.

(ii) **Trichinae destruction.** Fresh pork, including tongues, may be certified for export if frozen as follows:

a. 30 days at -15° C. (+5° F.)

b. 20 days at -23° C. (-9.4° F.)

c. 12 days at -28° C. (-18.4° F.)

(5) **Pork.** For pork or products with pork, the following statement must appear on MP Form 412-11:

"This product is derived from animals originating outside any zone restricted because of hog cholera and/or swine vesicular disease.

Ces produits de porc ou d'abats de porc ne sont pas de provenance d'animaux élevés dans une zone en quarantaine pour peste porcine ou maladie vésiculeuse de porc."

The French definition of restricted zone is that farm, county, or state(s) placed under official quarantine or other restriction due to an animal disease.

For fresh/frozen and uncooked pork and products containing pork muscle tissue, the following statement is

"This product has been prepared under USDA control and is frozen at (-°) C." Use of the words "frozen", "a", "b", or "c" of the legend. Freezing dates for individual cuts also be shown on labels and on MP Form 412-12 required for all frozen products.

(8) Bulk product; storage. Bulk products may be stored, trichinae free, in a cold storage facility, under Identification Series 3,000. In such case, labels (interior and exterior) will bear an identification legend with an establishment number in the 3,000 series. MP Form 412-12 must show name, address, and establishment number of producing establishment, name, address, and establishment number of the cold storage.

(9) Cuts, packages. When bone-in cuts weighing less than 10 pounds are wrapped or packaged, the label or package should show: (a) name, location, and license number of the establishment (legend) of preparing the product; (b) the species and name of cut; (c) weight, and (d) packaging.

Individual packages or cuts shall be labeled with the above labeling features.

(8) Labeling.

(i) Shipping containers. Shipping containers must bear all mandatory labeling information. An insert with identification legend and plant number must be placed on top of product inside shipping container. Freezing dates must be shown on outside labels. All individual containers placed within a shipping container shall be fully labeled.

(ii) Consumer-size packages. All consumer-size prepackaged meat and poultry products must bear labels printed in French (bilingual) labels

are acceptable) indicating net quantity in metric units and optimal date of utilization in addition to the other label features required by U.S. regulations.

French officials accept a seller/importer contract arrangement permitting net weight printing at production point or in France.

Some examples in which the optimal date of utilization may be applied are: "To be consumed preferably before (month and year)", or "Date of manufacture or date of freezing (month spelled out, day and year) followed by the length of optimal utilization." The French have recommended a period of 18 months for meat products and frozen offals.

(9) Processed product. Use MP Form 412-12 to certify processed meats, including edible fats. Official inspection seal should be placed on lower left part of the certificate. Duplicate labels are not required for packaged and labeled product certified with this form.

Retail packages. All canned or frozen meat or meat food products in containers, to be sold at retail or institutional levels, shall be marked with date or code date of packing. Date marking of packages or cans may be in figures or in code. If shown in code, such code must be given to French Ministry of Agriculture by exporter or his agent. Code information should be directed to: Service de La Repression des Fraudes, Ministère de l'Agriculture, Paris, France.

Frozen product, meat or edible by-product imported in large packages (bulk), is not covered by this rule.

(10) Unscalded stomachs. See 22.17(b).

(11) Casings. MP Form 412-12 shall be used with MPI seal impression.

Casings may be certified from unofficial premises, provided:

a. Plant preparing casings is open at all times to Federal inspectors.

b. Inspections are made periodically to insure that proper hygienic standards are maintained.

c. Casings are from animals slaughtered under Federal inspection.

d. Inspected plants from which casings are obtained shall be recorded under Item II "Origin of the Foods."

(b) Poultry Products

Issue MP Form 506, MP Form 81, and MP Form 82. These forms must be signed by an MPI veterinarian. The name of the ship by which the product is transported should be shown on MP Form 506 and MP Form 82 (under "remarks").

(1) **Eligible product.** The only poultry product which can be shipped to France from USA are livers. With the exception of livers, the shipment of poultry is prohibited from countries in which the use of arsenicals, antimonials, and estrogens in poultry production is not forbidden by law.

(2) **Labeling.** See (a)(8)(i)(ii).

(3) **Freezing.** Product must be frozen and stored at -12°C . ($+10.4^{\circ}\text{F}$.) or below. Other freezing requirements are the same as for meat (see 22.35(a)(4)).

(c) Horsemeat

(1) **Carcasses.** Sides and quarters derived from horses slaughtered in the U.S. may be exported from any official plant.

(2) **Imported horsemeat.** Horsemeat imported into the USA and handled in official USDA plants is not eligible for export to France as USA product.

(3) **Boneless cuts.** Boneless horsemeat and cuts may be shipped only from plants approved by French authorities.

(i) **Application.** France will not allow any more plants to be certified.

(ii) **Requirements.** French requirements for horsemeat boning and cutting plants are:

1. Plant must be well maintained and observe strict sanitary rules.

2. Packing rooms must be separate from (but may be directly connected with) boning/cutting rooms.

3. Galvanized metal equipment which contacts meat is not permitted.

* * *

(4) **Intestines.** Horse intestines, stripped free of contents without the use of water for rinsing and packed in salt, may be certified on MP Form 412-12. Cartons should be marked "Horse Intestines - For Export to France."

(d) Products Not For Human Consumption

(1) **Edible product for animal food.** Such product must meet all the requirements of edible product except those for carton marking and certification. Cartons must bear all required features including inspection legend and be marked "Use Restricted to Animal Food-For Export to France". Issue MP Form 140 along with the appropriate export certificate (MP Form 412-3 or 414-3). Only those plants in France which are authorized by the French officials may receive meat and offals intended for pet food. The name, address and approval number of the destination establishment must be shown on MP Form 140.

Certificates must also be marked "Use Restricted to Animal Food" and be signed by an MPI veterinarian.

Other French requirements will not apply to this product.

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(2) **Pharmaceutical products.** Issue MP Form 17.

(3) **Calves stomachs for rennet.** Issue MP Form 415-3 with the following additional certification on the reverse:

(a) derived from pathological changes in a federally registered plant, and (b) handled, packed, and stored following every step of the process."

free of acute animal epidemics--hog pest, hoof-and-mouth disease, etc.--during the last 3 months.

3. Animals from which byproducts were obtained were examined by a veterinarian, before and after slaughter, and were found healthy.

4. Territories through which swine were transported to port of loading, and port of loading itself, were not subject to any traffic restrictions for swine pest and hoof-and-mouth disease.

5. Byproducts are fit for human consumption without any restrictions, and do not contain any preservatives.

6. Wrapping material used is acceptable from a veterinary hygienic viewpoint.

7. Means of transportation have been disinfected with procedure recognized by legal authority. Means of transportation and condition of loading correspond to minimum requirements.

8. Animals from which byproducts were obtained were not treated with estrogens, hormones, or other acting substances, nor with sedatives, for residues in the organism which are dangerous to human health.

Hog cholera restriction. Hog pest the European term for hog cholera.

(b) Poultry Products

On an individual request basis, veterinary inspectors may state on export certificates covering shipments passing through East Germany that USA is free from hoof-and-mouth disease.

22.37 FRENCH POLYNESIA (TAHITI)

Plants to indicating the processing dates on the certificates and on individual certificates the following is required:

1. For frozen pork and pork products the following statement must be included: "In compliance of MP Form 130:

Plants has been treated for the control of trichinae by freezing for (number of) days at -15°C ." Acceptable temperatures and periods of freezing are:

1. at -15°C . ($+5^{\circ}\text{F}$.), 10 days;
2. at -25°C . (-9.4°F .), and
3. at -28°C . (-18.4°F).

Plants limit the storage of meat and poultry products to 3 months; therefore, they prefer that products exported be no more than 3 months old.

For products containing pork which are shelf stable or those which have been heated to an internal temperature of 58°C . (137°F .), such as sausage or smoked ham, may be exported to French Polynesia provided the treatment is specifically mentioned on the export certificate.

Export certificates are required for all poultry products including eggs.

22.37 GERMANY (EAST)

(a) Meat Byproducts

* Use MP Form 130. Upon plant's request, the MPI veterinarian signing the certificate may certify and sign on its reverse side the following required information:

1. Byproducts were produced in plants under constant veterinary supervision.

2. Animals, from which byproducts were obtained, originate from stock

22.38 GERMANY (WEST)

(a) Plant Approval

(1) Application.

Plants interested in exporting meat or poultry product to Germany must contact the circuit supervisor through the inspector in charge, and submit a completed MP Form 31, Establishment Application for Export of Meat or Poultry.

Type of operations--slaughter, processing, cutup, special cutup (100 g. - 3 Kg.)--should be identified on

MP Form 31. Upon application receipt, RD will assign a veterinarian to review the plant and determine whether it meets the German requirements. Upon completion, RD forwards it with his recommendations to ECS for transmittal to the German Government.

(2) Requirements.

(i) Meat plants.

1. Separate facilities for slaughtering suspect animals or acceptable arrangement for such slaughtering at other official plants.

2. A health certification, for each employee working with meat, to be carried out at time of hiring and thereafter annually. Health certificates must be kept on file and available to the inspector in charge.

3. Provisions for cleaning and disinfection of livestock transport vehicles, either on or off the premises of official plant.

4. A separate room or area for flushing, cleaning, and separating stomachs and intestines. If this operation is not separate from the slaughter area, provisions must be made for effectively confining wastes and splash from other operations by such means as partial partitions, separate drainage, etc.

(ii) Poultry Plants.

In certifying such plants, RD will ascertain that the requirements specified in Section 22.31-A(a)(1) and (3) are fulfilled. Also, an annual medical certificate must be on file for each plant worker.

(3) Plant certification. When MP Form 31 is approved and signed by FO, German authorities will be notified. The effective date of a plant's eligibility will be upon official publication of the plant's identity in West Germany's "Bundesgesetzblatt." This will be transmitted to RD's when received by FPS. Plants will be certified according to type of operation (slaughter, cut-up, processing).

(4) Storage eligibility. Product for export to Germany must be stored

either in official premises or in approved warehouses operating under Identification Service. Cold storage warehouses must submit a completed application (MP Form 526) to RD to be approved. RD will furnish names of such approved storages to FPS for transmittal to the German government.

(b) Certification

(i) Meat. For all meat products, issue MP Form 130 and in addition: * MP Form 410-10 for fresh meats and edible organs; MP Form 410-11 for processed meats; MP Form 410-12 for pork; and MP Form 410-13 for beef.

Part 22

all poultry products must be accompanied by MP Form 506 and MP Form 58 for fresh (frozen) or prepared meat and MP Form 59 for poultry products. This form is not required if the product has been heated to a minimum temperature of at least 160°F, and this is so indicated on MP Form 506. Furthermore, the form can be completed for products after the veterinary inspection officer determines, from a health examination in the State of origin, that an outbreak of disease, such as foot and mouth pest, or New Castle disease, was not officially reported within 40 days of the date of slaughter, and that such flock was immediately quarantined for diseases communicable to man. If no such management is required, the inspection officer in charge must, in advance of slaughter, make a determination can be made. Under item iv(f), enter "1S-73" in the space following "1S-73" in the space following the German word "Trichinae".

(ii) Inedible. Issue MP Form 415-3.

(4) Special certification. Other special certifications and official markings are described under the respective products.

(5) Personal consumption. A certification is not required for up to 6.6 kg (14.5 lb) of fresh (frozen) or prepared meat or poultry products brought into the Federal Republic of Germany by private passengers and other travelers for their own consumption.

(c) Meat Products

(1) Pork

(i) General requirements.

1. Hogs must be satisfactorily identified to the inspector as coming from States with a quarantine program for brucellosis and cholera, and do not originate from quarantined areas for brucellosis or cholera heads. Porcine infectious encephalomyelitis and foot and-mouth disease do not exist in the U.S.A.

2. Product identity must be maintained until packed for export.

3. Pork and pork products, which contain skeletal muscle, must be inspected for trichinae or be subjected to a specific refrigeration treatment. (This does not apply to livers, kidneys, and hearts.)

4. In addition to present requirements for certification of establishments, the establishments must also be certified as complying with the German trichinae requirements.

5. Hog carcasses may be shipped without heads.

6. Fresh pork tongues are not eligible for shipment.

7. Fresh pork fatbacks or pork bellies may be shipped in pieces weighing at least 7 pounds. Fatback, with rind removed, must be packed with five pieces to a package.

(ii) Trichinae inspection.

Acceptable methods for the trichinae inspection are the trichinoscopic examination, or the artificial digestion method. The Germans have described these methods in detail including the conditions for approval; i.e., pork inspected for trichinae must be marked accordingly, and laboratories for trichinae inspections must be located in the immediate vicinity of the slaughtering facilities for pigs. The detailed instructions for the inspection methods have been provided to each of the regional offices.

(iii) Refrigeration treatment. The refrigeration treatment of pork for trichinae may take place in a slaughterhouse or meat cutting plant.

certified for export to FRG, but not in an approved cold storage facility. The specific requirements for the refrigeration treatment are:

1. The temperature in the freezer must be no higher than -25°C . (-13°F). It must be measured thermoelectrically with calibrated instruments and recorded continuously. It must not be measured directly in the cold air current. The equipment must be kept under lock and key. The thermodiagrams must be marked with the numbers pertaining to the diary for export inspection as well as with the day and hour of the beginning and the end of the freezing process. The thermodiagrams must be kept for a year.

2. Pork with a diameter or a layer thickness of up to 25 cm. (10 in.) must be continuously frozen for at least 240 hours; and pork with a diameter or a layer thickness of more than 25 cm. but not exceeding 50 cm. (20 in.) must be continuously frozen for at least 480 hours. This freezing method is not acceptable for pork with a larger diameter or layer thickness than specified above. The freezing time starts when the temperature of the freezing space specified in number (1) is reached.

3. The technical equipment and the preparation of the freezer must insure that the temperature specified under number (1) is reached in a very short time and is maintained in all parts of the freezer including the pork.

4. The insulation wrapping must be removed before freezing the pork, except when all parts of the product brought into the freezer have already reached temperatures specified under number (1).

5. The shipments must be stored and locked separately in the freezer.

6. Each shipment must be marked with the day and hour it was brought into the freezer.

(iv) Trichinae certification. One

of the following statements must be typed above the veterinarian's * signature on MP Forms 410-10, 410-11 * and 410-12: *

1. The meat was examined and found * free of trichinae, or *

2. The meat was subjected to the * required freezing treatment.

(2) Beef, veal. Besides MP * Form 410-10, also issue MP form 410-13 for beef products. Beef products, from animals originating in modified, certified areas, or certified brucellosis-free areas, will qualify under Section III(1)(d) of MP Form 410-13. Establishments should contact Federal and/or State veterinary animal disease control officials for brucellosis certification.

1. Carcass. Skinned veal carcasses weighing not more than 165 pounds and beef carcasses may be shipped in halves and quarters without heads. Beef and veal carcasses are permitted entry with or without kidneys and kidney fat. If kidneys and kidney fat are attached, the kidneys must be exposed.

2. Tongues. Fresh beef tongues must be incised by the inspector on the ventral surface from tip to base as further examination for cysticercosis. The incision should be 3-4 inches lengthwise in the muscles on the lower side without heavily damaging tongue's body. Fresh beef tongues must be frozen for at least 6 days at temperatures not higher than -10°C . ($+14^{\circ}\text{F}$.) before export certification.

3. Livers. Hepatic lymph nodes are to be attached and incised by a number of incisions.

Beef and sheep livers. Bile duct will be opened by normal method. In addition, a transverse incision will be made across the omasal impression of liver's visceral surface, sufficiently deep to cut the smaller branches of the bile duct. A second transverse incision will then be made across liver's visceral surface from beside and below the caudate lobe cutting the smaller branches of the

(i) Bulk packages; shipping containers. Bulk packages and shipping containers of meat, meat food products, and byproducts must have an approved label. Label inspection legend must be so placed to be destroyed on package opening. Thus, labels should be applied on cartons at junction of closed lid flaps, or at junction of top and bottom on telescopic cartons. Labels must show:

- a. Serial number.
- b. Inspection legend with establishment number
- c. Product name.
- d. Species of animal from which derived.
- e. Net weight.

(ii) Consumer packages. Fresh, frozen meat products in consumer packages must carry day, month, and year of production in that order such as 16-2-73. The label would read: "Hergestellt am _____" (manufactured on). The packages also carry the German statement "Auch bei Lagerung nur begrenzt haltbar." This means that shelf life is limited even when refrigerated.

(5) Processed.

(i) Definitions. German law defines processed meat as having been treated by one of the following methods:

1. Heating to a minimum internal meat temperature of 149° F. (65° C.) or at least 10 minutes.
2. Pickling or curing so that meat contains at least 4 percent salt.
3. Rendering of fats.

Cooked beef, including cooked frozen beef in vacuum-type plastic containers, may be exported from approved plants, if heated to a minimum internal temperature of 149° F. for at least 10 minutes.

(ii) Net weight. Labels of consumer packages must show weight of meat or meat filling (including sausage) at time of packaging or canning. If product contains ingredients other than meat, total net weight is also required on the label.

Liquid or concentrated meat soups may

have volume stated on label in lieu of total net weight. If meat contains bone or loses weight from further processing after packaging or canning, a statement to this effect is required on the label.

(iii) Production date. Consumer package products, capable of storage without refrigeration for at least one year, must carry production year such as "1973." It may be stamped or embossed on the can or package. Coding is not allowed.

Frozen products in consumer packages, dry sausages, and cured cooked meats--ham, frankfurters--must carry month and year of production such as "2-77." The label should read "hergestellt am _____" (manufactured on). Coding is not allowed.

(iv) Lard. Lard must be prepared without refining. It shall not be older than 8 weeks from time of production to export.

Containers. Lard may be exported only in the following containers:

1. Wooden boxes holding 25 kilograms (approximately 55 pounds) with one partition forming two 12.5 kilogram parcels. Wooden boxes must be lined with impermeable paper to completely cover the product.

2. Carton holding 10 kilograms (approximately 22 pounds). Carton must be made of impermeable material or be lined with paper as above.

3. Metal drums approximately 180 kilogram capacity (approximately 397 pounds) whose inside walls are of acceptable, noncorrosive material.

Additives, antioxidants. The following may be added to lard in unspecified amounts and without declaration: sodium citrate, ascorbic acid, sodium ascorbate, erythorbic acid, sodium erythorbate, tocopherols with acetic acid and with fat-forming fatty acids--stearic, oleic, linoleic, linolenic, palmitic and myristic.

Sampling. Laboratory samples should

Part 22

presence of BHT, BHA, and other antioxidants which are prohibited. Peroxide values not to exceed 10. To get a representative sample, sufficient samples must be taken from the final product (e.g., etc.). For example, if from a single lot or batch, sample eight or nine samples and take one sample from the middle of each. Equal parts of four or more samples (not more than 10) must be combined into a composite sample.

Antioxidant restriction waived. Antioxidants in lard are waived, for special purchases for Berlin storage purposes. Certificates for shipments must include BHA, BHT, and/or gallates. Must be modified by a statement of the presence and amounts of antioxidants.

Poultry Products

(1) Definitions:

(a) Fresh. Includes frozen carcasses, cut-up poultry, and giblets.

(b) Processed. German law defines processed poultry as having been treated by one of the following methods:

(1) Heating to a minimum internal temperature of 149° F. (65° C.) for at least 10 minutes.

(2) Pickling or curing so that all parts of the poultry meat contain at least 4 percent salt.

(3) Smoke-cured poultry products must have at least 2 percent salt.

(4) Rendering of fat.

(5) Seasoned. Seasoning of poultry by immersion in a seasoning solution is not acceptable. Poultry and poultry parts seasoned by dry method must be readily detectable by sight or smell and/or by laboratory methods.

(2) Grading. As required by U.S. regulations, all consumer packaged poultry--halves, breasts, legs, thighs, and drumstick bearing letter grades

designations (A, B, or C)--must be officially graded by licensed grader of the Poultry and Dairy Quality Division, Poultry Grading Branch, FSQS. Exception: Regulations do not apply to rock cornish game hens, guineas, boneless rolls, wings, backs, necks, tails and giblets.

(3) Labeling. All labels and markings must be clearly visible and legible (approximately the same size, type and boldness as U.S. printing); reflect the quality and standards adopted in FRG; and be approved by MPBLB. Markings must be in German.

Since product labeled "keep frozen" must meet extremely restrictive requirements, it is advisable to use term "frozen."

(4) Special mark. All packaged product must be labeled and identified with a grade mark and with an establishment identification mark in the exact following form:



The establishment number will be that of the plant making the shipment. Letters and figures in the stamp must be at least 2 millimeters high. This mark will be considered part of the label and should be printed on labels submitted to FSQS for approval. Plain bags or cartons may not be used.

(5) Label application. Labels and marks may be applied by using stickers which cannot be removed, or by inserts placed between product and wrap.

(i) Carcasses. Poultry carcasses not individually wrapped in foil must be identified with a tag or clip made of sanitary, moisture resistant material and attached to each carcass. The tag or clip must bear special mark, as under (4) above.

(ii) Consumer size packages. Individually wrapped carcasses, parts, or other poultry products in "end user" or consumer size packages must show special mark, as under (4) above. This labeling must be printed on the bag or on an insert made of sanitary material and placed within the bag. The labeling must not be removable and must be visible, and legible. Such wrapped carcasses or parts need not be identified with a tag or clip. Specific weight limits have not been established for "end user" packages. It is known that West German border inspectors generally accept bulk packaged poultry parts and byproduct in bags weighing up to 10-15 kilograms (22 to 33 pounds) as individually wrapped "end user" packages. U.S. exporters are advised to continue to consult with their West German importers regarding the accepted maximum weight of bulk packaged product and the required labeling.

(iii) Crates, cartons. Labels for crates and cartons containing carcasses, parts, or other poultry products must bear oval establishment identification marks, shown under (4) above. The letters must be at least 0.8 cm high and the figures at least 1.1 cm high.

(iv) Shipments for further processing.

Identification of each carcass with tags or labeling on individual bags is not necessary for shipments from an approved U.S. slaughter plant to an approved West German cutting plant. In such cases the name and address of the receiving plant and the words "For Cutting Only" must be shown on the shipping carton in legible letters. For further requirements the exporter should consult with his West German importer.

(v) Shipping containers. Bulk carton and package labels must be so applied that they are destroyed by opening. Printed bags must be so

closed that labels are destroyed by opening.

(6) Backs. When poultry or poultry products for export to Germany include ready-to-cook poultry "backs," "striped backs," "backs and necks," or any combination, the inspector (or grader) shall add the following German wording on the certificate after name or kind of product (appropriate space): "Huehnerschlachtabfall, Geniessbar." This term means "byproduct" and is desired by German officials. It does not apply to any other product and should not be used for whole carcasses; i.e., fryers, young turkeys, etc.

(e) Products Not for Human Food

The eligibility of such products for export to Federal Republic of Germany is not limited to certified U.S. plants.

(1) Pharmaceutical use. Undenatured pancreatic glands and undenatured lungs for such use should be without marks of inspection and accompanied by MP Form 415-3 with the following statement on reverse of form or on USDA-FSQS stationery attached to the form: "This product originates from animals that received ante-mortem and post-mortem inspection and were found to be healthy." Export certificate and each carton in the shipment must be marked "(Species) Pancreatic Glands or (Species) Lungs for Pharmaceutical Use Only."

(2) Animal Food.

(i) Inedible product. Undenatured lungs and lung lobes, other than those condemned on post-mortem inspection, consigned to a West German animal food plant must be properly identified and certified. Issue MP Form 415-3 with the following additional certification on USDA-FSQS stationery attached to the export certificate:

1. Animals from which the product is derived were slaughtered at official establishment no. ____, where they were subject to ante- and post-mortem inspection and were found free of con-

... to in 1. ori-
... located within a
... (6.29 miles)
... of foot-and-mouth
... noted within 30
... shipment. Note:
... free from foot-

... to in 1. origi-
... in which no hog cholera
... has been offi-
... 30 days prior to
...

... also indicate "For
... be signed by an

... product Edible meat/
... poultry/byproducts for
... U.S. regulations
... Cartons must bear
... and be marked "For
... For Export to West

... products issue MP
... the same certification
... for inedible product
... In addition, issue the
... in German and English
... 412-3-A.

... poultry/byproducts issue
... 412-3 and identify that
... designed to an animal
... West Germany.

... to Military

... for U.S. military personnel
... may originate from any
... in the United States.

... to military. Shipments
... and poultry products by mili-
... are covered by an
... agreement between the Depart-
... West German officials wherein
... ports may be made under re-
... certification. This applies
... shipments under Defense Per-
... Supply Command (DPSC) manifest,
... "Order Substance," made
... facility identified

under "Source Loaded Products." Cer-
tifications are made at (a) military
supply depots or at various collection
points, including processing plants
where no MPI veterinarian is assigned,
by a military veterinary medical offi-
cer, or (b) by MPI veterinarian at
producing plants for brand name prod-
ucts and for products prepared under
military specifications when the re-
quest for export certification is
accompanied by DPSC Form 300

(i) Certification. Export stamps
are not required for "military to
military" shipments.

1. Meat Issue MP Form 130 for
all meat products and MP Form 62 for
all meat products other than shelf
stable canned products. For shelf
stable canned products, type on the
MP Form 130 the following
statement in German:

"ALLES FLEISCH UND FLEISCHERZEUGNISSE
VON RIND, KALB, SCHWEIN, SCHAF ODER
ZIEGE, DIE IN DOSEN ODER LUFTDICHT
VERSCHLOSSENEN BEHAELTNISSEN IN DIESEN
CONTAINER ENTHALTEN SIND, SIND IN
DIESEN DOSEN ODER BEHAELTNISSEN DURCH
ERHITZEN AUF MINDESTENS 100 GRAD C
HALTBAR GEMACHT WORDEN."

OFFICIAL SIGNATURE

The English translation is as follows:
"All meat and meat products of beef,
veal, pork, mutton, or goat in cans or
hermetically sealed packages that are
in this container, have been preserved
in these cans or packages by heat of
at least 100° C."

Inform the exporter to place the
original with other shipping documents
inside the container. The German
statement from the reverse of MP Form
412-3 should also be typed or printed
on a 3x5 card. Sign the statement,
place date in upper left corner and
container number in upper right corner
and attach the card to rear door of
container.

When MP Form 62, "Health Certificate

Chart 22.3-A - Certificate for edible meat not for human consumption

P

Bescheinigung (Certificate)

für Fleisch, das nicht zum Genuß für Menschen verwendet werden soll und noch nicht zum Genuß für Menschen unbrauchbar gemacht worden ist. (For meat which is not to be used for human consumption and has not yet been made unsuitable for human consumption)

Ursprungsland (Country of Origin):

Ausstellende Behörde (Issuing Authority):

I. Angaben zur Identifizierung des Fleisches (Data Concerning the Identification of the Meat):

Fleisch und Tiegattung (Meat and Species):

Art der Teile (Specification of Parts):

Art der Verpackung (Type of Packing):

Zahl der Teile oder Packstücke (Number of Parts or Packed Pieces):

Anschrift des Betriebes (Address of Company):

Kennzeichnung (Marking):

II. Bestimmung des Fleisches (Destination of Meat):

Das Fleisch, Die Nebenprodukte, die Eingeweide wird/werden versandt von (The meat, the by-products, the organ-products is/are shipped from).

(Versandort; Place of Origin)

nach (to):
(Bestimmungsort und -land; Place and Country of Destination)

mit (by):

Name und Anschrift des Absenders (Name and Address of Sender):

Name und Anschrift des Empfängers (Name and Address of Recipient):

III. Bescheinigung (Certificate):

Der unterzeichnete amtliche Tierarzt bescheinigt bezüglich des vorstehend bezeichneten Fleisches, daß bei der amtlichen tierärztlichen Schlachtier- und Fleischuntersuchung das Fleisch zum Genuß für Menschen tauglich beurteilt worden ist oder dabei keine für die Gesundheit des Menschen gefährlichen Erreger oder Schmarotzer festgestellt worden sind. (Concerning the above meat, the undersigned official veterinarian certifies that during the official veterinary ante-mortem and post-mortem inspection the meat was judged to be suitable for human consumption or that no bacteria, virus, or parasites were found which may be harmful to human health.)

Ausgefertigt in (Issued in) am (on)

Dienstsiegel des amtlichen Tierarztes
(Seal of the Official Veterinarian)

(Unterschrift des amtlichen Tierarztes)
(Signature of the Official Veterinarian)

Part 22

... Beef and Pork
... manufactured from
... by an MPI
... title "Veterinary
... crossed out, and
... veterinary
... "Official Veter-
... crossed out. All
... form 62 should be
... and distributed

... 130.
... MP Forms 130
... 79 is not required
... been heated to an
... of at least
...), and this is so
... 130.

... shipments. When ship-
... firms to the
... Germany (where
... for sale only to
... are made without
...), issue export
... in (b).

... AT BRITAIN - UNITED

... products

... (canned, cooked,
... (rendered) meat products
... for U.S. military
... originate in MPI certi-

... approval. Plants, includ-
... plants, desiring to
... further processed (canned,
... cured, or rendered) meat
... to the United Kingdom (UK)
... the requirements of this
... and submit an application
... through RD to the Deputy

... facilities and equipment. All
... in Section 22.31-A(a)(1)
...

... (ii) Inspection supervision. In fur-
... processing plants either a veteri-
... inspector or a food inspector
... be present during the produc-
... for the UK. In those cases

where a food inspector is in charge,*
an MPI veterinarian should visit the*
establishment at least once a month and*
file a brief report of his findings;*
this report should be available for*
examination by visiting UK reviewers.*
For all consignments destined for export*
to the UK, veterinary authorities must*
assure that all UK requirements have*
been met.*

(iii) Flow of product. The pro-
duction departments should be divided*
into two self-contained sections; one*
dealing with reception and preparation*
of the raw meat, and the other dealing*
with cooking, packaging and freezing*
procedures. The principal aim in the*
separation of the premises into two*
sections should be to ensure that*
there is no risk of raw meat and*
cooked meat having contact with each*
other and to ensure a logical flow*
from raw to cooked product with no*
back tracking or line crossing of*
product, equipment, or personnel.*
Each section should have its own*
separate welfare facilities. Com-
municating doors between raw and*
cooked sections should be tight*
fitting when closed. Doorways with-
in the individual section may be*
fitted with properly maintained*
plastic curtains.

(iv) Room temperature. Adequate
temperature control must be main-
tained for cutting/boning, curing,
and slicing rooms.

(v) Canning.

1. Preliminary checks must be
made on empty cans received from the
manufacturer. Besides visual seam
checks, side seam measurements must
be made and recorded

2. Seam checks must also be made
on filled cans during production
with the frequency determined by the
volume. Can seam evaluation should
address the following critical
factors: a. Free space, b. Percent-
age overlap, c. Side seam juncture,

d. Counter sink depth, and e. Tightness rating. Records on empty and filled cans should be maintained for 3 years.

* 3. If water is used for cleaning empty cans it must be 180° F.

* 4. Filled and seamed cans must be thoroughly washed by mechanical means before processing.

* 5. Retorts and retort baskets must be maintained in a clean condition.

* 6. Automatic time and temperature recording devices for retorts must be lockable and calibrated regularly.

* 7. After heat processing and preliminary water cooling, touching of cans by hand prior to drying is to be discouraged.

* 8. Can drying locations must be situated in areas of the plant so as to prevent any risk of contamination.

* 9. All cans in the UK official sample must be opened and the contents subjected to an organoleptic and pH examination. FSIS has determined the UK official sample will be 5% of samples incubated by USDA with a minimum of one can per production shift.

* 10. Water samples should be taken from a variety of points through the establishment at least once every month. Plant quality control laboratories may be utilized. Samples should be tested for coliform organisms and total aerobic colonies made after 5 days incubation at 20-22° C. (68-71.6°F.).

* a. If any 100 ml sample shows the presence of coliform organisms, new samples should be drawn from the sampling point and be examined immediately. If re-sampling also shows the presence of coliforms, steps must be taken immediately to remove the pollution.

* b. Total aerobic colony counts under most circumstances should not exceed more than 100 organisms/ml after incubation for 5 days at 20-22°

C. If any sample exceeds 100/ml, follow-up sampling must be conducted immediately.

c. Those plants which treat their own water supplies which are obtained from rivers, canals, etc., shall ensure that full treatment is carried out. This includes sedimentation (with or without flocculation), filtration, and chlorination. The method of chlorination shall be sufficient to produce, after 20 minutes contact time, a minimal free residual chlorine content of 0.5 ppm at the point of use. Means of chlorination should be automatic and the equipment should be fitted with an alarm system to warn of failure in the chlorination system. Drip and siphon systems are not acceptable. For bacteriological examination of chlorinated water supplies, the chlorine in the sample should be neutralized with sterile sodium thiosulfate. Failure to neutralize the chlorine may give false negative results. DPD-1 tablets should be used for rapid colorimetric estimations of chlorine.

11. All can cooling water shall be chlorinated in a manner that permits 20 minutes of contact time with chlorine prior to use. A level of at least 0.5 ppm free residual chlorine must be consistently demonstrable at the cooling water exit. If cooling water is recirculated, it must be filtered before re-use. UK requires weekly total plate counts on can cooling water (See 10.b. above). Plants must record chlorine level measurements during each retorting cycle and at least hourly in continuous retorting processes.

12. Detailed reports on all water sampling shall be on file and available to inspection personnel. Records applicable to UK requirements shall be maintained for 3 years.

product; certification.

responsibility of the
that products meet
standards expressed
"Sausage or Other
"7"

water and supplementary

signed by an MPI
Certain federally

are approved by VS

slaughter of cattle,

from Canada, and for

from Mexico. Meat

produced in such

not be certified for

unless arrangements,

the veterinarian in

ade to identify and

articles from product

export to UK. The

products may be exported:

(i) Fresh/frozen For meat and by-

cattle, swine, calves,

Issue MP Forms 130 and

The animal disease situa-

United States is such that

statement on MP Form 131

made.

and byproducts from

(e.g., ass, mule) type the

the reverse of MP Form

The horsemeat/offal contains

of any meat or offal

any ruminant animal or

Horsemeat and horsemeat

may originate from

U.S. plants and from foreign

certified for importation of

into the U.S.

(ii) Processed Importer must

a permit to import processed

which do not meet UK fully

requirements. The permits

the certification statements

Recent permits required

Form 130 plus certification

similar to those specified

Form 131, and that African swine

has not occurred in the United

during previous 12 months.

An additional statement for fully

bacon, ham and pork space ribs

as follows: "The product has

been subjected to pumping with brine
under a pressure of 80 lbs. or more
to the square inch and subsequently
soaking in brine or dry salting for
a period of not less than 4 days; or
salting (wet salting or dry salting)
for a period of not less than
10 days.

Additionally, the following state-
ment was required for sliced bacon:
"The pumped bacon was subjected to
pumping with brine under a pressure
of 50 lbs. or more to the square inch
and subsequently smoking for a period
of not less than 12 hours at a
temperature of not less than 120°F.

(iii) Cooked. Meat/byproducts from
all species must be fully cooked. UK
considers meat fully cooked if pink
juices cannot be expressed. Type
the following statement on MP
Form 130:

"I certify that the meat described in
the schedule below has been prepared
under the terms and conditions of an
official certificate recognized by
the Minister of Agriculture, Fish-
eries and Food, and the Secretary of
State for Scotland in accordance with
the provisions of the Imported Food
Regulations 1968 (or the Imported
Food (Scotland) Regulations 1968)."

(iv) Canned. Shelf stable canned
product from all species, packed in
hermetically sealed metal or glass
containers, may also be exported.
Issue MP Form 130.

(v) Product for U.S. military forces.
Certification requirements are the
same as for commercial shipments.

(vi) "Papain" kidneys. When they
are to be shipped for edible pur-
poses, they must be (1) from feder-
ally inspected carcasses, (2) handled
as edible product, (3) kept identifi-
fied, and (4) packed in containers
labeled "Beef Kidneys - Tendered with
Papain--For Export Only."

(vii) Casings. They must:

1. Originate from animals slaughtered in plants certified for export with the UK and the establishments which process the casings must also be certified for export to the UK.

2. Be accompanied by a declaration on USDA letterhead stationery signed by an authorized veterinary officer stating that the casings were cleaned and scraped.

3. Be identified by approved label with inspection legend including an establishment number in the 3,000 series (Food Inspection Service.)

4. Upon exporter's request be accompanied by MP Form 415-5.

In order to comply with the UK requirements, plants wishing to export casings to the UK will have to apply for (Food Inspection Service).

* * *

(viii) Fats, oils.

1. Certification. Issue MP Form 130. Original must accompany shipments. Shipments arriving without certificate will be refused entry. Include the following on the export certificate:

a. Location of tanks. For example, Port #3 or Starboard #2 shall be shown in the space for "Shipping Marks" and "Stamp Numbers." Tanks shall be identified again in the "No. Column" as P-3 or S-2.

b. For each tank, the estimated product weight shall be listed in the weight column. Such weight may be obtained from marine surveyor.

c. A statement of cleanliness should be made in the description column to read: "The pipes and pumps used for loading lard or fat and the tanks were inspected and found to be clean before the lard or fat was loaded."

2. Requirements:

a. Ship tanks. They will be inspected and passed for cleanliness before product is loaded onto the

ship. Marine surveyors will do this inspection under general inspector's supervision. To be acceptable, tanks must be clean, dry, and free of residues from previous cargoes.

b. Product from I.D. Service. When product is shipped from an Identification (ID) Service place, an inventory of federally inspected lard or rendered fats will be maintained. Records will include additions to and removals from each storage tank. Inspector should be able to estimate product amount in storage at any time. An inspection opening is required on each tank. Transfer from tank to ship is permitted only through a line without other connections than to the tank. Product transfer may also be accomplished by use of tank trucks. Ship tanks shall be examined to assure they are empty before operations start. Loading will be done under continuous supervision of the inspector. If operations are interrupted for any reason, the hatch on the tank must be sealed. The seal must not be broken until operations are resumed.

c. Label. Approved label(s) bearing printed inspection legend with establishment number (317.2) will be attached to the export certificate. Establishment number will be in the 3,000 series for product shipped from an ID Service installation. One export stamp will be issued for each ship's tank. Stamps shall be attached to all hatches of filled tanks. Original export certificate and attached label(s) shall be delivered to the shipper, who shall deliver them to the chief officer of the vessel carrying the shipment. The chief officer shall present the certificate and label(s) to the port health authority on arrival in UK.

d. Antioxidants. Edible fats and oils may contain antioxidants in the following amounts:

Propyl gallate, octylgallate, dodecylgallate, or any mixture of the three-----100 ppm

butylated hydroxyanisole (BHA) 200 ppm
 butylated hydroxytoluene (BHT) 200 ppm
 Ascorbic acid (AA) and BHT----200 ppm
 Total antioxidants-----100 ppm
 The product contains antioxidants,
 and must include a description
 of the antioxidants, and maximum amount
 of each antioxidant per million.

g. Marking, labeling. UK recognizes the Federal meat inspection system, with establishment number of the plant, as being the "official certificate" for importation of meat into the United States. Such marking must be as required by regulations (32.1), and must be affixed to all cartons and packages of meat and meat products. For large commercialized shipments (vans), it must be attached to the container. If the container holds product from more than one plant, it must bear an identification legend from each official plant represented by the product in the container or product label with the identification legend may be applied to containers at places outside official plants by using ID Service (R).

Compliance with regulations (322.4), MP form 130 and mark outside containers as required by Section 322.4 of the regulations.

(4) Prohibited importation. The following importations are prohibited:

a. Scrap meat. Meat consisting of scraps, trimmings, including beef tongue trimmings, or other pieces (with or without bone) of such shape or in such condition as to afford insufficient means of identification with a definite part of a carcass.

b. Any carcass part chopped or mixed with or without spices, cereal products, salt, flavoring, vegetables, or other ingredients.

Exception: Beef patties, flake steaks, fresh beef or pork sausage, etc., may be shipped to the military.

c. Heads without submaxillary lymph nodes.

d. Livers without hepatic lymph nodes. These nodes must be incised and left attached to the livers. **Exception:** Hepatic lymph nodes are no longer required to be attached to beef, sheep and pork livers. (Only whole livers are eligible)

e. Boneless meat from calves less than 3 months old.

f. Products containing erythorbic acid or sodium erythorbate.

(5) Ports of Entry. Fresh, chilled, or frozen meats or by-products may enter UK only through the following ports: Avonmouth, Cardiff, Dover (Eastern Docks), Felixstowe, Folkstone, Great Yarmouth, Grimsby, Harwich, Liverpool, London (Royal Group), London (Tilbury), Newhaven, Plymouth, Sheerness, Southampton, and Tyne (North Shields).

Processed or canned products are permitted entry at all ports.

(b) Poultry Products

(1) Plant approval. Federally inspected plants desiring to export poultry products to the UK must submit an application (MP form 31) to RD. In certifying such plants, RD will ascertain that the requirements specified in Sections 22.31-A(a)(1) and (3) are fulfilled.

An MPI veterinary inspector should be present in poultry slaughterhouses during production for the UK. See Section 22.39(a)(1)(ii), (iii), (iv), and (v)10. for further information.

Additionally, the immersion chill media cannot be recirculated either inside or outside of the chiller or pumped from the chiller to a heat exchanger and returned to the chiller.

(2) Eligible product; certification.

(REFERENCE FSIS DIRECTIVE 9225.2, 4/30/86.)

(ii) Cooked/canned poultry. Cooked poultry must originate from carcasses which were derived from slaughter plants certified as eligible to export to the UK. See (a)(1)(v) and (b)(1).

(iii) Dehydrated poultry; rendered fat. Dehydrated chicken (poultry) and rendered poultry fat may be certified for export without issuing MP Form 412-14. Allowances for antioxidants are specific. Butylated hydroxyanisole and butylated hydroxytoluene are permitted in anhydrous edible oils and fats to the extent of 200 ppm. Propyl gallate is permitted to the extent of 100 ppm.

(3) Ships' stores. When poultry carcasses are exported for ships' stores, the following requirements must be met:

- a. Eviscerated carcasses may be accompanied by giblets.
- b. A specific veterinary certificate is not required.
- c. Carcasses must be frozen.
- d. Consignments must be imported into the port where poultry will be loaded on the ship. Cross country journeys of consignments between ports will not be permitted.
- e. Consignment must be moved, on landing, directly to a bonded warehouse at the port of import supplying the ship, and must be held there under Customs' bond. Poultry supplies should be taken directly from warehouse to ship.

If all these conditions are not met, importations for ships' stores must meet the same requirements as imports of poultry into UK.

(c) Products not for Human Consumption

(1) Edible product for animal food. The certification requirements are the same as those described for edible products with the exception that the livers need not have the hepatic lymph nodes incised or attached. The shipping cartons shall be labeled as follows: "Not for Human Consumption - for Export to UK."

(2) Inedible products. Inedible products can originate in any USDA plant. All inedible products except lungs must be decharacterized. The following statements are required to be issued on USDA/FSIS letterhead and signed by an MPI veterinarian:

a. The meat/offal is derived from animals slaughtered in abattoirs licensed for the production of meat for human consumption.

b. The meat/offal is derived from animals which received veterinary ante and post mortem inspection by an official Veterinary Surgeon and showed no evidence of the following diseases: Foot and Mouth disease, tuberculosis, brucellosis, anthrax, rabies, plus (for ruminants: cattle plague, bovine pleuropneumonia and enzootic bovine leukosis); (for swine: African swine fever, hog cholera, swine vesicular disease and Teschen disease).

c. The meat/offal has been obtained from animals that have been resident in the USA for at least 3 months prior to slaughter or since birth in the case of animals less than 3 months old.

d. The meat/offal has not been obtained from animals which come from a holding or area which for health reasons is under restriction for any of the diseases mentioned in b.

e. The meat/offal has not been obtained from a slaughterhouse which is under restriction as a result of Foot and Mouth disease.

f. (For swine: No vaccine against hog cholera containing a live or attenuated hog cholera virus has been used in the USA during the previous 12 months).

g. (For swine: There has been no outbreak of hog cholera in the USA during the previous 12 months).

The meat/offal must be placed in sealed cartons which are labeled: "Not Intended for Human Consumption."

Item b can readily be stated if the animals pass inspection. UK is aware that MPI inspectors perform

under the supervision of

to areas quarantined
as stated in b. The IIC
the nearest VS office
animals to be slaught-

from quarantined areas.
following additional statement
for horsemeat/offal:
horsemeat/offal con-
no admixture of any meat/offal
from any ruminant animal or

b. Name of products (anatomical
commercial terms for meat cuts
edible byproducts)

c. Species.

d. Number, type of packing,
markings of packages.

e. Gross and net weights.

f. Date(s) of slaughtering
freezing.

g. Mode of conveyance.

h. Full name and address
exporter.

i. Full name and address
importer (consignee).

2. Wholesomeness, packing, and
marking:

I, the undersigned (full name and
title), authorized Doctor of Veteri-
nary Medicine certify that the abo-
mentioned meats:

a. Were inspected by me today and
found absolutely suitable for human
consumption;

b. Come from animals which we
examined before and after slaughter
were found free from communicable
ordinary diseases, and absolute-
ly suitable for human consumption;

c. Originated, were slaughtered
and processed in areas declared by
Veterinary Services to be free of
foot-and-mouth disease for at least
months and free of African pest for
at least 12 months prior to slaughter;

d. Derived from animals slaugh-
tered, processed, packaged, and froze
in modern facilities operated under
national inspection program, thus
qualified for export.

e. Contain no preservatives,
colorants, and residues of antibio-
tics, oestrogens, pesticides, or
gland suppressing substances at
levels endangering the health of
consumers;

f. Are packed and marked as des-
cribed under 1 above.

3. Date and signature of veteri-
nary official of meat and poultry
inspection, visaed by Greek consular
authorities.

22 40 GREECE

The following certification
requirements in (a) for fresh
(frozen) meat and poultry exports to
Greece are derived from changes in
Greek law (Presidential Decree 653 of
August 5, 1977). In addition to the
requirements that must be satisfied
in the certification, issued by an
FIS veterinary officer, there are
several additional requirements in
the Decree, e.g., freezing tempera-
tures, storage time limitations,
etc., that will not be covered by
FIS certification. The exporter/
producer is responsible for such
requirements. Copies of the Decree
are available from MPI regional
offices or FPD. Interested parties
should become familiar with Greek
specifications.

(a) Certification

Issue MP Form 130 for meat and
poultry products. They must be
visaed by Greek consul.

(1) Fresh/Frozen. For fresh
(frozen) meat and poultry and edible
byproducts thereof, issue also a
hygienic veterinary certificate on
departmental letterhead stationery
containing the following information:

1. Identity and description of
meats (under Greek definitions the
term "meat" applies to meat and meat
byproducts and poultry meat and
poultry byproducts; the term "animal"
applies to livestock and birds):

a. Number, name, and address of
official establishment.

(2) Canned and other processed products. Canned meat or poultry and other processed meat or poultry products must be accompanied by a certificate on departmental letterhead signed and dated by an MPI veterinarian which states the following:

a. The (species) from which the meat (poultry meat) is derived were slaughtered in slaughterhouses inspected by a government veterinary official.

b. The meat (poultry meat) is unquestionably fit for human consumption and originates from animals (birds) which have been subjected to ante- and post-mortem inspection and were found to be free of contagious diseases.

c. The products were inspected at the time of shipment and were found unquestionably fit for edible purposes.

d. The preparation and packing of these products were made under the same health provisions as applied in the United States under veterinary inspection.

e. The products are marketed in the same form and composition in the United States.

(b) Meat Products

(1) Fresh.

(i) Eligible product:

1. Meat. Whole carcasses, sides, quarters, "primal" cuts, and boneless meat of cattle, calves, sheep, goats, and swine; trimmings and head meat (without the mouth epithelium, the salivary and lymph glands) of beef in bulk.

byproducts. Heads of lambs and goats, without noses and lips; (small portions) of ruminants; livers, spleen, hearts, kidneys and brains of ruminants; back fat bellies (with or without skin) of

in one or more places depending on the size of product. Slaughtering or freezing dates are required on individual pieces of meat weighing more than 11 lbs. (5 kg).

Packaged meats, any size or weight, must have the following information clearly and legibly printed on the outside of container (carton, box, etc.) or on a label securely attached to or placed inside of container:

1. The country of origin.
2. Official establishment number.
3. Species (may be omitted for carcasses, sides, and quarters).
4. Product's name (trade name for meat cuts).
5. Slaughtering or freezing date(s).
6. Mark of inspection, whether shown or not on individual pieces of meat in the package.

7. Shipping containers should also bear the words "For Export to Greece" and "For Manufacture" (the latter if meat is shipped for further processing in Greece). These wordings require only local approval and should be applied in a stencil or rubber stamp in bold type letters at least 1 inch high.

NOTE: Any other methods of marking fresh meats for Greece, such as coding, are not permitted.

(2) Canned and other processed products. The following must be shown on the label:

a. Country of origin and name of manufacturer.

b. Name of product and ingredient statement.

c. Statement that product is sterilized (shelf stable) or pasteurized (perishable). If sterilized, date of preparation; if pasteurized, date and lot of preparation and date through which product may be distributed for consumption. Greece has a maximum time limit of 2 years for perishable canned product.

d. Code markings may be used on cans provided code identification is given to Veterinary Service, Greek Ministry of Agriculture.

(iii) Packaging. Cartons of products must not exceed 66 pounds (30 kg) net weight with 10 percent allowance. Carcasses, carcass sides, quarters, primal cuts, boneless meat, and trimmings of ruminants and swine must have two wrappings.

Inside wrapping shall be of approved, nontoxic, transparent, pressure-resistant plastic material with limited permeability.

Outside wrapping shall be: for beef, use approved heavy material or jute bag; smaller cuts, less than 6.6 lbs. (3 kg), meat trimmings and byproducts - carton or wooden box securely tied on outside.

For swine, sheep, calves, goats, use jute or other heavy material (no jute bag), smaller than 6.6 lbs. (3 kg) cuts, trimmings, and byproducts - carton or wooden box securely tied on outside.

Back/fat bellies (with or without skin). They must be, by pairs touching their inner surfaces, placed in appropriate plastic containers inside a carton or wooden box. Clean salt of excellent quality and antioxidants are permitted.

Byproducts. Beef livers and brains of ruminants must be wrapped separately in approved plastic material and placed in a carton or wooden box. Other byproducts must be wrapped either separately or in a uniform mass of similar entrails, in a plastic material or waxed paper and placed in a carton or wooden box.

(iii) Inspection marks, freezing dates, labeling. Carcasses, sides, quarters, and primal cuts of ruminants and swine, livers and fillets of beef must show a legible inspection legend

c) Poultry Products

(1) Fresh.

(i) **Eligible product.** Whole carcasses, halves, and parts of chickens, turkeys, ducks, and geese, and edible byproducts thereof, may be exported.

(ii) **Packaging.** Carcasses must be well drained to avoid buildup of ice crystals weighing more than 2 percent of the weight of dressed bird, and packaged in an airtight, sealed plastic bag, and placed in sturdy, well lined cartons or wooden boxes.

Halves, quarters, or pieces, and byproducts (liver, spleen, heart, and stomach) must be packaged in plastic bags, trays, or corrugated plastic cartons covered by transparent plastic material and placed in cartons or wooden boxes.

(iii) **Freezing dates, labeling.** See section 22.40(b)(1)(iii).

(iv) **Inspection before shipping.** A visual inspection of frozen poultry shall be made before shipping to assure that product is normal and does not show any difference in color or evidence of dehydration or freezer burn, and is free from mold or other evidence of spoilage.

(2) **Canned and other processed product.** See section 22.40(b)(2).

(d) Ships' Stores

Fresh, frozen, or nonfrozen meat and poultry products exported for use on ships sailing to Greece must comply with all applicable Greek export requirements.

(e) Greek Examination

Upon importation, meat and poultry products will be given visual inspection and a laboratory examination by Greek authorities.

22.41 GUADALUPE

Exports to Guadalupe, French West Indies, must meet the same requirements as those destined to France.

However, when codes are used in lieu of actual dates on cartons or cans of product to be sold at retail or institutional levels, the exporter must furnish such codes in advance of shipments to the Chef du Service Veterinaire, Direction Departementale de L'Agriculture Service Veterinaire, Jardin Botanique, Circonvallation, 97 100 Basse Terre, Guadalupe.

22.42 GUATEMALA

Meat Products

Export certificate to be visaed by consul of that country.

22.43 HAITI

Meat Products

Casings. Export certificate to be visaed by consul of that country.

22.44 HONG KONG

(a) Meat Products

Issue MP Form 412-3 and list products individually. The wording "miscellaneous meat products" is unacceptable.

(1) **Prohibited product.** The following meats and meat byproducts are prohibited entry:

a. Scrap meat--meat consisting of scraps, trimmings, or other pieces (with or without bone) of shape or condition to prevent identification with a definite carcass part.

b. Carcasses with pleura or peritoneum removed (except swine).

c. Meat without skeletal lymph nodes (except mutton and lamb).

(2) **Horsemeat; restriction.** Horsemeat may be exported to Hong Kong provided:

a. An application is submitted to and is approved by the Director, Medical and Health Services, Urban Services Department (USD), Hong Kong.

b. The product is shipped under refrigeration and is accompanied by a certificate issued by MPI. Such certificate should state that the product is: (1) from animals that received

(1) Antemortem inspection and post-mortem inspection and (2) inspection for disease, and (2) inspection for consumption and suitable for export. The certificate should state that all necessary precautions have been taken during meat dressing, chilling, and packing. Upon consignment arrival and departure hours, a written report is submitted including product amount, description, storage place, name of persons of involved retailers. The product will be subjected to inspection by USD food inspectors at the time of release.

(3) Pork uteri. Nongravid uteri may be exported as edible product. For inspection, chilling, packing, and certification, see section 22.51(4)(8). Cartons must be prominently labeled "Pork Uteri for Export to Hong Kong." Importers are responsible for obtaining a special permit from Hong Kong Urban Services Department for each consignment.

(b) Poultry Products

Inspected poultry is eligible if accompanied by MP Form 506.

(1) Ducks. Ducks with head and feet attached may be exported. However, they shall be prepared and labeled according to instructions for Japan with appropriate name changes in labeling and statements.

(2) Feet, oil sacs, duck tongues.

They shall be:

- a. Removed after dressed poultry receives final wash, before entering the evisceration room, or immediately after transfer from picking to eviscerating conveyor line.
- b. Handled sanitarily, packed in clean containers, and frozen promptly.
- c. Labeled as "chicken feet", "chicken oil sacs", or "turkey feet", "turkey oil sacs", or "duck feet", "duck oil sacs", "duck tongues" - for export to Hong Kong. Packed under sanitary supervision of USDA. Plant

NO. _____. (Name and address of plant or distributor) USA. Official inspection mark will not be used. Certificate to be made by inspector at plant of origin only.

When above requirements are met, inspector may issue an export certificate including:

"This certifies that the poultry feet, oil sacs or duck tongues specified above have been processed in compliance with the Regulations Governing the Inspection of Poultry and Poultry Products. (9 CFR Part 381) as promulgated by the Secretary of Agriculture, and are sound and unadulterated so far as can be determined by external examination."

This certification may be typed in "remarks" space, or on certificate's face immediately above "remarks" space. Inspector initials immediately after the certification, and signs the certificate.

(3) Hong Kong examination. Hong Kong officials may sample for bacteriological examination and refuse entry to unsatisfactory product.

Plant management shall cooperate in proper handling of this product and instruct plant employees to reject any feet, oil sacs, or duck tongues obviously unfit for food.

22.45 HUNGARY

Meat Products

Pork livers. The following statement on departmental letterhead certificate should accompany the regular export certificate: "The animals from which the livers were derived received veterinary ante- and post-mortem inspection and were found to be free from evidence of contagious and communicable diseases. The United States is free from rinderpest, hoof-and-mouth disease, and contagious bovine pleuropneumonia. The livers are suitable for human consumption and were packed under good sanitary conditions."

22.48-A ISRAEL

Edible offal products, such as hearts, livers, and tongues shall be individually wrapped and each individual item shall bear the mark of inspection. Lead tags and twisted wires attached to meat tissue are not acceptable. Noncorrosive, nontoxic tags shall be affixed to the tissue by a pliable plastic thread.

22.49 ITALY

(a) Meat Products

MP Form 130 must be visaed by Italian consul. Also issue MP Form 42, Certificate of Origin and Health for Importation of Meat into Italy.

(1) Certified plants. Only plants certified by USDA to the Italian Ministry of Health may export meat and/or meat food products. To be certified, plants must submit MP Form 31, Application for Approval of Establishment for Export of Meat to Italy, through RD to ECS.

(2) Animals' origin; certification.

Meat and meat food products (from all species) must be from animals born and grown in the United States. Herd's origin must be identified on MP Form 42. An owner's certificate must accompany animals to slaughter stating:

"I certify that animals of this shipment have not been treated with antibiotics during the week preceding slaughter; nor have they been treated for zootechnical or therapeutic purposes with natural or synthetic hormones, tenderizers, anti-hormonal or arsenical or antimonial substances, or with substances dangerous or harmful to human health. I further certify that these animals originate from premises where natural or synthetic hormonal or anti-hormonal substances are forbidden to be kept or used for any purpose."

Exception: Plants certified for export to Italy may ship beef imported from countries which prohibit the feeding or administration of hormonal substances to animals. Issue MP Form 130 with the following statement typed on the reverse and signed by the same veterinarian who signed the face of the certificate: "I certify that the meat or meat food product mentioned herein is derived from beef imported into the USA from _____ (name of country) where the feeding of

hormonal substances to food animals is prohibited by law."

(Signature)

~~Name and Title of MPT~~
Veterinarian

Countries eligible to export meat to the United States and whose laws prohibit the feeding of hormonal substances to food animals include Argentina, Australia, Brazil, Czechoslovakia, Denmark, France, Germany (Federal Republic of), Honduras, Hungary, Ireland, Italy, Netherlands, New Zealand, Northern Ireland, Paraguay, Poland, Romania, Switzerland, Uruguay, and Yugoslavia.

Plant management is responsible for maintaining adequate identity of meat and/or meat food products derived from these animals and intended for export to Italy.

(3) Slaughter. Animals showing fatigue or excitability must be rested for at least 24 hours before slaughter. Evisceration must be completed within half an hour after bleeding. Carcasses of equines more than 4 weeks old or of calves more than 3 months old must be cut in halves before inspection.

(4) Inspection. Besides the required procedures in Part 11, the following must be done:

a. Incise each beef cheek twice with one deep and one superficial cut, and the beef tongue's base once.

b. In all species, split trachea and main bronchi, make a transverse incision in the lower third of the lungs through the main bronchi, and incise pulmonary lymph nodes.

c. Besides opening the heart's chambers and severing the septum, incise both halves of the heart from auricle to apex.

d. Incise epigastric, renal, and mesenteric lymph nodes.

e. Make two transverse incisions in beef and equine livers to expose main bile ducts (Fig. 22.2).

diagnosis after pleura
by plant employee (in all
cases)

(5) Prohibited product. The following is prohibited entry into Italy:
* Meat and pork byproducts,
* including lard.

* Meat from emergency slaughtered
and/or diseased animals, from tuber-
culosis reactors, and from animals
with any form of tuberculosis or
mycobacteriosis.

* Meat treated with any coloring
or preserving substance; exposed to
ionizing radiation or ultraviolet
rays, or sprayed with chlorine solu-
tions.

(6) Fresh or frozen product. Only
meat prepared according to Article 7
of the Italian list of technical re-
quirements is eligible. Copies of
this list may be obtained from RD.
Product from processing plants must be
properly identified as originating in
approved plants. Refrigerated (unfro-
zen) meat must be from animals slaugh-
tered not more than 5 days before
shipping.

Horsemeat. Shipments of chilled or
refrigerated (unfrozen) horsemeat will
not be permitted entry later than 30
days after slaughter of the animals.
Slaughter date(s) must be entered on
MP Form 414-3; name of month must be
spelled out.

(7) Labeling. Shipping container
must bear a label so attached that it
breaks when container is opened. The
label must show plant's name and
address, product's name, species, net
weight, and packing date.

* (8) Casings. Issue MP Form 415-5
* for casings originating in the United
* States.
* Casings imported into the United
* States which are accompanied by certi-
* ficates stating that casings were
* derived from healthy animals which
* received ante-mortem and post-mortem
* inspection may be re-exported to Italy
* when accompanied by a USDA letterhead

certificate which specifies date, *
number of containers, weight, descrip- *
tion of product, identification marks, *
exporter, consignee, circuit number, *
and the following statement signed by *
an MPI veterinarian. "I hereby certify *
that the animal casings covered by *
this certificate were derived from *
healthy animals which received ante- *
mortem and post-mortem inspection." *

The exporter is responsible for pro- *
viding the health certificates, which *
allowed the casings to be imported *
into the United States, to the USDA *
inspector. *

(b) Poultry Products

(1) Estrogen certification. Poultry
products must be accompanied by
MP Form 130, signed by a Federal *
veterinary inspector, and bear the
following statement:

"The poultry products covered by
this certificate came from birds rec-
ognized as being healthy prior to
slaughter. The product is wholesome,
fit for consumption, and from birds
that have not been treated with estro-
gens for either therapeutic or zoo-
technic purposes."

Note: Plant numbers and plant names
must be shown on export certificates.

(2) Italian examination. Poultry
products entering Italy may be tested
for estrogens, even when above certi-
fication is on the face of export cer-
tificates. Product showing positive
results to the "mouse test" will be
refused entry. In addition to an
entry refusal, all USA poultry may be
barred from Italy. Thus, MP Form 130 *
must not be issued unless it is cer-
tain that the product is, in fact,
free of estrogens.

(3) Control. To prove that vet-
erinary control was effected before
shipment, each shipping and immediate
container shall bear the inspection
mark with the plant number.

(4) Parts. Poultry parts (skin attached), except wings, heads, necks, and feet may be imported. Wings and backs--institutional- or bulk-pack--may be imported into Italy only for production of poultry extracts (soups).

Each package shall be protected by a plastic wrapping or other suitable material and shall bear all mandatory information.

(5) Processed product. Poultry products with antioxidants must meet the following conditions:

1. The antioxidant must have been added separately to the fat before mixing with poultry meat.

2. The maximum allowable level of 303 Butyl oxyanisole in fat is 0.03 percent.

A statement indicating that these conditions were met shall be included on MP Form 130.

(c) Shipments for Military

Shipments of products by military to military are covered by an agreement between Defense Personnel Supply Command (DPSC) and the Italian officials. The military will issue their own export certificates for shipments of meat and poultry products from military points of embarkation (Cheatham Annex, Bayonne, Naval Supply Center, Norfolk, etc.) to U.S. military personnel in Italy.

To provide the military veterinary medical officers with background information for military export certification, MPI officials at the point of origin should, in addition to MP Form 130, issue the following health certificates presently required for meat and poultry exports only to Germany: MP Form 62 for beef, pork, and products thereof; or MP Form 70 for poultry. Since these certificates are filed and kept only for reference after the military issue their own export certificates, it is not essential to identify the final ("overseas") destination for such shipments.

Military export certification does not apply to meat and poultry products shipped to military dependents in Italy. These are commercial shipments and must be certified as described in section 22.49(a) and (b).

(d) Pharmaceutical Products

Issue MP Form 130 (MP Form 414-3 * for horse meat product) if handled as * edible product. MP Form 42 is not * needed. If otherwise, a certificate * signed by an MPI veterinarian on * USDA/FSIS letterhead must be issued * stating that the product is from animals which were healthy before and after slaughtering. Certificate must also state that denaturation was not performed at the plant of origin. Organs must be free of lesions and alterations and must be collected in plants authorized for export to Italy.

The inspection requirements * specified in Section 22.49(a)(2), (3) * and (4) do not have to be fulfilled * for pharmaceutical products. Cartons * must be marked "For Pharmaceutical * Purposes Only". *

Product must be frozen and packaged according to specifications described in Italian "List of Technical, Hygienic and Sanitary Guarantees and Conditions for Chilled Meat . . ."

Package labeling must show species, name of exporter, anatomical denomination of product, and name of origin country.

22.50 JAMAICA

Meat Products

The following statement should be added to the export certificate covering fresh, frozen, cured, and/or smoked product: "The United States is free from Foot-and-Mouth Disease."

22.51 JAPAN

The full name and address of the actual consignees must be shown on export certificates for meat and poultry shipments to Japan. Using the name of the exporter as the consignee is not acceptable. Metric weights are required for only LIPC shipments. See 22.51(a)(3).

(a) Meat Products

(1) Certification. Include the word "chilled" or "frozen," as applicable, on MP Form (MP Form 130 under "product description" and on MP Form 412-13 in block 2). For product containing meat and poultry, regardless of which is predominant, issue MP Form 130 and MP Form 412-13.

* MP Form 412-13. Slaughter dates are required only for quarter, half or whole carcasses. Blocks 5 and 9 should be completed only for above items; they should be left blank for items such as beef cuts, primal parts, meat byproducts, partially defatted (species) fatty tissue and freeze dried products. Complete blocks 6 and 7 for plants preparing cuts or packing byproducts (including primal parts, PD(S)FT and freeze dried products). Complete blocks 7 and 8 for processed products. Fill in FSIS in block 10 for fresh/frozen product. Indicate species for each item in block 1; for example, all beef franks must be shown as "beef" and franks made of beef, pork, and chicken as "beef, pork, and chicken."

(2) Fresh beef. When export shipments of beef consist of a variety of different beef cuts in a single shipment the term "Beef Cuts" may be used in the certificates and the cartons to identify the products. Note: This does not apply to LIPC which is described below.

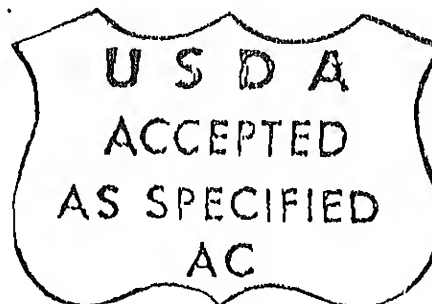
(i) Hanging tenders; beef skirt diaphragm. Hanging tenders and the beef skirts derived from the diaphragm are considered to be offals in Japan, and therefore, are not subject to LIPC requirements. "Beef Skirt Diaphragm," or the terminology "Beef Outside Skirt--Diaphragm Meat" must be shown on boxes and certificates for beef skirt derived from the diaphragm. The term "Diaphragm" is not permitted on certificates or cartons if the product is not derived from the diaphragm or consists of a mixture of meat from diaphragm and other anatomical origins.

(ii) Partially defatted beef fatty tissue and freeze dried beef. The Japanese place these products in the raw meat category; therefore, the same certification must be made as required for fresh, chilled or frozen meat.

(3) LIPC (Livestock Industry Promotion Corporation of Japan). LIPC has special requirements for U.S. beef cuts.

(i) Applicant. The party applying for export certification of beef to Japan must state on MP Form 130-A "Exporter advises shipment is subject to requirements of LIPC tender," or "Exporter advises shipment is not subject to requirements of LIPC tender." The applicant must also furnish the inspector a copy (or copies) of an "Agricultural Products Acceptance Certificate" completed by a USDA Meat Grader (which corresponds to the lot of product which will be presented for inspection) for all cuts purchased by LIPC tender except for 121D Beef Skirt Plate.

The Agricultural Products Acceptance Certificate will show the quality and yield grade, name of cut, IMPS item number and date packed. All cartons covered by this certificate are sealed and stamped with the "USDA accepted as Specified" stamp as shown by the facsimile.



(ii) Inspector. Prior to issuing the export certificates, the inspector shall determine that each carton is correctly marked with: 1. Quality and yield grade, 2. Name of cut, 3. IMPS item number, 4. Date packed, 5. "USDA Accepted as Specified," stamp, 6. Product of USA, 7. Name and establishment number of packer, 8. Finish of

packing (frozen, chilled, etc.), and 9. Net weight in metric units (handwritten legible block Arabic numerals are acceptable).

The inspector shall also ascertain that MP Forms 130 and 412-13 have the following information: 1. The statement "Exporter advises shipment is/is not subject to requirements of LIPC tender" as shown on MP Form 130-A, 2. The quality and yield grade, name of cut, and IMPS item number in the space for "Description of Item or Product," and 3. The metric weights.

(iii) **Net weight.** If not preprinted by the label manufacturer, the net weight should be stenciled, stamped or handwritten on the carton. The Japanese regulations regarding net weight require that each carton of chilled or frozen beef destined for LIPC must show net weight in kilograms down to tenths of a kilogram. Net weight of less than one-tenth of a kilogram (such as one-hundredth of a kilogram) must be disregarded. If conversion from pounds to kilograms is necessary, use one pound equals 0.45359 kilograms and show kilogram weight to the nearest tenth, i.e., 50 pounds equal 22.6 kilograms. Net weights on export certificates should be shown as kilogram weights, but corresponding pounds may be shown in parenthesis or beneath the kilograms. See 317.2(h)(4) of the Meat and Poultry Inspection Regulations for net weights on containers.

(iv) **IMPS (Institutional Meat Purchase Specifications).** IMPS item numbers must be shown on export certificates for all beef cuts except for 121D Beef Skirt Plate (see below).

(v) **Beef Skirt Plate.** The name "Beef Skirt Plate" must be shown on boxes as well as certificates, and not the terminology "Inside Skirt" or "Muscle, Transversus Abdominis." Grader certificate is not required. The number 121D is required to be shown on the boxes, but not on the export certificates. (Requirements

for other items in the 121 series are complicated, e.g., quality grade is required but yield grade is not necessary for 121B, and in most instances 121C is exempt from grading. Check with the meat grader if you have further questions on the 121 series.)

(4) **Processed Products.** The product descriptions entered on MP Forms 130 and 412-13 should coincide exactly with product name approved by MPSLD. Sodium tripolyphosphate and sodium phosphate are permitted to be used in processed meats.

(i) **Roast beef.** The only standard which the Japanese will accept for roasting beef is an internal temperature and time of 145° F. for 30 minutes.

(ii) **Products which may contain sodium nitrite.** Ham, bacon, corned beef, and sausage products may contain up to 70 ppm nitrite. Beef Jerky Ground; Beef Jerky Sausage; Beef and Soya Jerky; and Kippered Beef Ground and Formed are examples of products which the Japanese consider as sausage. The nitrite analyses may be confirmed only by a USDA laboratory.

(iii) **Products in which sodium nitrite is prohibited.** Beef Jerky; Natural Beef Jerky; Beef Jerky Sectioned and Formed; and products not listed in previous paragraph should not contain nitrate or nitrite.

(5) **Stomachs for edible use.**

(i) **Scalded.** Sodium gluconate, sodium metasilicate, sodium persulfate, and calcium oxide are not permitted for use in preparation of scalded beef tripe certified for export to Japan. Other denuding agents listed in section 318.7 of the meat inspection regulations may be used.

(ii) **Unscalded.** See section 22.17 (b). In addition to the rumen and reticulum, properly cleaned omasum

(intestines), and abomasa (true stomachs) may be exported under inspection marks and edible certification.

(6) Ligaments and tendons. Nuchal ligaments and tendons including the Atlanto-occipital tendon may be certified for human consumption on MP Forms 130 and 412-13.

(7) Intestines. Beef intestines (small and large) may be exported as edible product bearing the inspection legend, provided they are properly cleaned, packed, and frozen, and are accompanied by MP Form 130 and MP Form 412-13. Cartons should be labeled "Beef Intestines - for Export to Japan."

Pork large intestines may also be exported if properly cleaned and scalded. After cleaning, they must be scalded at 80° C. (176° F.) for 3 minutes. Cartons should bear the inspection legend and be labeled "Scalded Pork Large Intestines - for Export to Japan." When the export request is for chitterlings, scalding is not required and cartons should be labeled "Chitterlings."

* (8) Uteri. Nongravid uteri from
* gilts or heifers may be exported as
* edible product and certified on MP
* Form 130 and 412-13. Immediately
* after passing inspection, uteri must
* be chilled (preferably in crushed
* ice), drained, packed, and frozen.
* "Hot" freezing is not permitted.
* Cartons must be labeled "Beef (Pork)
* Uteri for Export to Japan."
* Any inspection, in addition to that
* required by Section 11.1(n), and any
* additional inspection supervision,
* requested to ensure that the certifi-
* cation requirements are met, is reim-
* bursable as provided in Part 350 of
* the regulations and section 26.2 of
* this manual.

(9) Beef pizzles. Beef pizzles may be exported as edible product and certified on MP Forms 130 and 412-13. Pizzles to be saved for export must remain with the carcass or viscera and be examined by visual inspection. Immediately after passing inspection pizzles must be chilled, drained, packed and frozen. "Hot freezing is not permitted." Cartons must be labeled "Beef Pizzles for export to Japan". Handle reimbursable as shown above.

(b) Poultry Products

MP Form 130 signed by an MPI veterinarian may be issued provided:

1. All domestic poultry (chickens, turkeys, guinea fowls, ducks, pigeons) certified for export to Japan were examined before and after slaughter and found to be healthy and free of evidence of contagious poultry diseases including but not limited to fowl pest, Newcastle disease, and fowl cholera.

2. Processing plant was under continuous Federal veterinary supervision.

3. All poultry were found to be healthy and fit for human consumption.

4. Containers are made of hygienic material. Container label has product name; name, address, and number of processing plant; and USDA official inspection mark which certifies the product was inspected for wholesomeness. On the export certificate under "Remarks," enter the following:

"Products meet requirements contained in U.S.-Japan letter of understanding of August 4, 1967."

On MP Form 130, under "remarks," include the word "chilled" or "frozen," as applicable.

(1) Ready-to-cook (all classes). A shank portion may be left attached to the hock joint. Since such joint is not to be opened, inspectors must observe the joint area for swelling or abnormality that might affect product wholesomeness.

Only poultry from lots showing no evidence of infectious synovitis shall be processed with the shank portion attached. The scaly tissue on the shank attached to the carcass must be completely removed.

This exception (to the Manual) is made according to section 381.107 of the regulations.

When poultry for export to Japan are processed with shank portion attached, the statement "portion of shank attached" shall be entered on MP Form

* 130 under "remarks."

Firms may use approved labels without further approval to identify this product, provided the statements "portion of shank attached" and "for export to Japan" appear clearly and prominently on the label identifying the product.

(2) Ground or comminuted.

Ground or comminuted turkey or chicken may be exported without prior testing for Salmonellae, provided it is accompanied by MP Form 130, bearing the following statement under "Remarks": "Products meet requirements contained in U.S.-Japan letter of understanding of August 4, 1967." Such products include those labeled "Ground Turkey," "Ground Chicken," "Ground Turkey Meat," "Ground Chicken Meat," "Mechanically Deboned Turkey," "Mechanically Deboned Turkey Meat," and "Mechanically Deboned Chicken Meat." However, the Japanese Ministry of Health and Welfare reserves the right to test such shipments for Salmonellae upon arrival and exporters should be aware of such testing and possible rejection as a result of such test.

Exporters may choose to pretest such products for Salmonellae and obtain certification prior to export. If so,

the following establishment sampling requirements must be met for each lot:

a. Plant will randomly select and separately collect 13 1/2-pound samples from each lot. Twenty-five gram portions of each sample will be

analyzed for Salmonellae following the method outlined in the Microbiological Laboratory Guidebook. Samples may be composited by laboratory

In this sampling, a lot is the total production of one shift's operation, processed by one basic process from one basic raw material, and packaged in one type and size containers; a shift is the processing period operated with the same personnel with a maximum of 12 hours or entire production for the day if less than 12 hours.

b. In addition to plant sampling, the inspector should sample to verify plant findings. He should have plant personnel draw 1/2-pound companion samples as they perform their routine sampling of finished product. The establishment should notify inspector of sampling times so he can be present if he wishes. In either event, the plant employee will take the two identical samples and the inspector will choose one at random. The inspector's samples should be sealed, frozen, and kept under security. The inspector can choose one or more of the 13 samples and send those selected to the USDA laboratory at his discretion, based upon plant production history. Such samples should be identified with the phrase "Export Certification Salmonellae."

Plant samples should be sent to an independent laboratory for Salmonellae analysis. Copies of the analysis results must be sent to the plant and inspector in charge.

Lots or portions of a lot may be certified for Salmonellae only on the basis of negative findings in all 13 samples submitted.

If all sample results are negative for Salmonellae, the following certification statement should be entered on MP Form 130: "Random samples * selected from the lot were analyzed for Salmonellae and were found to be negative."

Arrangements satisfactory to the inspector in charge must be made for the identification and control of

the receipt of
supervision,
that the certifi-
are satisfied, is
provided for in
regulations and
Manual.

(3) Ducks. Ducks with head and feet attached must have passed ante- and post-mortem inspection, and be a ready-to-cook product (head and feet attached). They must be completely defeathered, including nasal passages thoroughly washed. Gullet and windpipe must be removed. Feet must be scaled and toenails removed. Since the hock joint is not opened, inspectors must observe joint area for swelling or soreness that might affect product edibility. Product must be fully packed to comply with the act and regulations. Glass name should read "Ducks with clean head and feet attached." All labeling shall bear the wording "for export to Japan only."

Labels must be submitted to MPSLO for approval before use.

(4) Cables. Each shipment must be accompanied by MP Form 130. Cables sent subsequent to arrival of product without MP Form 130 will not be accepted.

(c) Personal Consumption

Personal consumption entries of inspected and passed meat and meat products and poultry and poultry products are permitted under simplified certification as provided in section 322.4 of the regulations. Such product need not be accompanied by MP Form 130 and MP Form 412-13 and must enter Japan as it was packaged at time of preparation in a federally inspected plant.

The package must be labeled to include: (1) name of product, (2) name and address of packer or distributor,

(3) statement of net quantity of contents, and (4) official inspection legend including the official establishment number. For other than shelf-stable canned product, the label must bear the following statement immediately below the product name:

(1) Meat. "The meat contained herein is for personal use only and not for sale. It is derived from animals that received ante- and post-mortem inspection and were found sound and healthy and have been inspected and passed as provided by law and regulations of USDA."

(2) Poultry. "The poultry contained herein is for personal use only and not for sale. It is derived from birds that received ante- and post-mortem inspection and were found sound and healthy and have been inspected and passed as provided by law and regulations of USDA."

(3) Applying label to package.

The required labeling must be applied to the carton by a printed adhesive label that will tear paper if removed and must be so placed on the carton that the label would be destroyed if the package is opened between time of packaging at the producing establishment and inspection at the Japanese port of entry. Thus, labels should be applied on cartons at the junction of closed lid flaps or at the junction of the top and bottom of telescope cartons.

(d) Pharmaceutical Products

For hog pancreas glands, issue MP Form 415-3 and the following additional certification typed on the reverse: "This byproduct was derived from healthy animals, which passed ante- and post-mortem inspection and were found to be wholesome and free from adulteration."

The statement "Pig Pancreas Glands for Pharmaceutical Use Only - Export to Japan" must be shown on export certificates and on each shipping container.

(e) Shipments to Military

Delivery/Purchase Order Number must
* be placed on face of MP Form 130 for
all Defense Personnel Support Center
(DPSC) purchases of poultry.

22.52 JORDAN

Beef carcasses and cuts may be exported
to Jordan without special requirements.
* Issue MP Form 130.

22.53 KENYA

Meat Products

* Issue MP Form 130. For casings,
issue MP Form 415-5.

22.54 KOREA (SOUTH)

(a) Import Permit

The importer must obtain an import
permit from the South Korean Ministry
of Agriculture and Fisheries for each
shipment of edible and inedible products.

(b) Meat Products

(i) Pork uteri. Nongravid pork
uteri from gilts may be exported
as edible product. For inspection,
chilling, packing, and certification,
see section 22.51(a)(8). Cartons must
be prominently labeled "Pork Uteri -
for Export to South Korea."

(ii) Unscalded. See 22.17(b). Un-
scalded stomachs and intestines may be
exported as edible product. For un-
scalded tripe, complete MP Form 412-13
by typing the word "Modified" above
(Certificate for Export to Japan) and
the words "Issued for Export to South
Korea" below (Certificate for Export
to Japan). The remainder of the form
should be completed according to in-
structions for export to Japan in
Section 22.51.

(c) Inedible Products

Issue MP Form 415-3 with the follow-
ing statement typed on the reverse:
"The material described hereon ori-
ginated in a plant operating under
Federal inspection and is from animals

and post-mortem
ground free of
"enter"
viruses may be
...
... for human

... immediately after
... loose contents.
... inedible by
... by the applica-
...
... (species)
... and include
... address, and
... without official
... (2) net weight (in
... "frozen," or "keep
... applicable, and
... South Korea."

22.54 KUWAIT

General Requirements

Report guidelines Information
... requirements
... from Kuwait. To
... completion of export
... current information
... U.S. exporters may wish
... trend toward uniform
... in the Gulf States
... guidelines, the standards
... Section 22.77 for Saudi

(2) Labeling

... fresh frozen Fresh/frozen meat
... products must bear the
... in addition to those
... features mandatory in the

... labels,
... net weights Lettering
... for unit net weight must
...
... date (freezing or
... dates) Spell out or
... name of month: (Jan. plus
...
... expiration date. Spell out or
... name of month: (Jan. plus
... poultry expiration time
... one year. Acceptable
... alternatives are:

a. Specific expiration date up to *
maximum of 12 months, or *
b. Statement, "Product good for one *
year from (date of production)". *

(ii) Processed Products

1. Procedures used must meet Codex *
standards. *
2. Pork tissues or lard are not *
permitted in formulated products. *

(3) Packaging.

1. Fresh/frozen product must be *
visible through wrapper. *

(b) Certification.

(1) Export certificate. Issue MP *
Form 130. *

(c) Islamic Requirements.

(1) Islamic Centers. Copies of the *
list of Islamic Centers are available *
from RD or ECS. *

(2) Certificate of Islamic slaughter.

In addition to FSIS certification, the *
exporter must obtain a certificate of *
Islamic slaughter from a member of an *
Islamic Center. The certificate must *
be endorsed by the U.S.-Arab Chamber *
of Commerce or by a Kuwait Consulate. *
The telephone number of the U.S.-Arab *
Chamber of Commerce is (202) 293-3162. *

22.55 LEBANON

Meat Products

Processed products shall bear manu- *
facture date on immediate container. *
If coded, explain each code on export *
certificate.

22.56 LIBYA

Poultry Products

Issue MP Form 130 for frozen poul- *
try. Sanitary certificates will be *
prepared by regional office, and re- *
turned to the supervisor for distribu- *
tion (see France).

22.57 LUXEMBOURG

Meat Products

* Issue MP Form 130.

Byproduct. Byproducts such as livers must individually bear marks of inspection.

22.58 MALAYSIA

(a) Meat Products

* (1) Certification. MP Form 130 shall be accompanied by a veterinary certificate on USDA letterhead stating:

a. The country was free from foot-and-mouth disease and rinderpest for 12 months immediately before slaughter of animals from which products were derived.

b. Meat or meat food products derived from animals subjected to ante- and post-mortem examinations and were free from infectious and contagious disease; products for export to Malaysia are fit for human consumption; and every precaution has been taken to prevent contamination before export.

c. In case of pork or pork products, a further veterinary statement is required certifying that the country or district was free of swine fever (hog cholera) during the past 6 months. "District" has been interpreted to mean a State or county. This statement is not required for canned pork products or lard.

d. A veterinarian must sign all certificates (followed by his degree, such as D.V.M.). The signature must be impressed with the official seal of the United States Department of Agriculture, Meat and Poultry Inspection Program.

(2) Permit. An import permit is required from the State veterinary officer permitting the importation of such product into Malaysia.

NOTE! DUE TO CONDENSED MATERIAL, PAGE 261n WAS NO LONGER NECESSARY; THEREFORE, PAGE 261o FOLLOWS THIS PAGE.

(b) Poultry Products

(1) Fresh/frozen. For all poultry, the MP Form 130 shall be signed by an * MPI veterinarian and contain the following statement: "The (poultry) products were derived from (poultry) subject to ante- and post-mortem examinations and have been found to be free from infectious and contagious disease. The (poultry) products are fit for human consumption, and every precaution has been taken to prevent contamination prior to export. Foot and mouth disease has not existed since 1929, and rinderpest has never existed in the United States."

(2) Cooked. Only hermetically canned cooked poultry may be exported without the certification statement specified immediately above.

22.59 MALTA

Poultry Products

Issue MP Form 130 without additional * statements for all shipments.

22.60 MARTINIQUE

Exports to Martinique, French West Indies, must meet the same requirements as those destined to France. However, when codes are used in lieu of actual dates on cartons or cans of product to be sold at retail or institutional levels, the exporter must furnish such codes in advance to the Director des Veterinaires, Direction Departmental de L'Agriculture, Boulevard General Charles de Gaulle, Fort-de-France, Martinique.

22.61 MEXICO

Meat Products

Five copies of the export certificate are required. The fifth copy should be a photostat of the original.

Unscalded stomachs. See 22.17(b).

22.62 MONACO

Monaco is considered to be part of the French territory. Therefore, all sanitary and customs regulations for Monaco are the same as for France.

22.63 NETHERLANDS

(REFERENCE FSIS DIRECTIVE 9355.1, 6/12/85.)

22.65 NEW CALEDONIA

Meat Products

Issue MP Form 412-3 with the following statement typed on the reverse:

"I further certify that in accordance with official declaration by the Veterinary Services of the U.S. Department of Agriculture, the United States is free from rinderpest (bovine pest), contagious bovine pleuropneumonia, foot-and-mouth disease (aphthous fever), and hog cholera (pork pest)."

The export certificate and the statement must be signed by the same MPI veterinarian.

The animal disease situation in the United States is such that the required statement can be routinely made.

22.66 NEW ZEALAND

(a) Meat Products

(1) Beef. Issue MP Form 412-3 with the following statement typed thereon: "The United States is free from foot-and-mouth disease."

(2) Pork. Fresh or frozen pork and pork products are not eligible for export.

(3) Casings. They may be admitted to the ports of Auckland, Gisborne, Napier, New Plymouth, Wanganui, Wellington, Lyttleton, Timaru, Port of Callaghan, Dunedin, or Bluff, when accompanied by a certificate, completed by exporter and MPI inspectors shown in Charts 22.4 (Form No. 1) and 22.5 (Form No. 2).

A certificate including Form No. 1 and Form No. 2, as above specified, shall be prepared in duplicate by exporter and inspector in charge. Certificate forms shall be supplied by exporter. Animals are to be slaughtered in official establishments and sanitarily handled. Before certification, the inspector in charge shall

Chart 22.4 - Exporter's certificate

Form No. 1

I, (give name and status) of the (give name of premises), (where casings are produced or prepared) situated at or near (give name of town) in the country or district of (country), in the country or State of (State) do hereby solemnly and sincerely declare that the sausage casings more particularly described below to be shipped by _____ of _____ to _____ of _____.

- Were derived from animals which received ante-mortem and post-mortem veterinary inspection at the time of slaughter;
- Were found to be healthy and in every way suitable for human consumption;
- Are sound, healthful, wholesome, and otherwise fit for human consumption;
- Have not been treated with chemical preservatives or other foreign substances injurious to health;
- Have been handled only in a sanitary manner; and
- Were not exposed to contagion prior to exportation.

Description of Casings		
Number and Description of Packages	Description of Casings	Amount and Marks

And, I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provision of (state here under what statutory provisions the declaration is made).

Signed _____ "

Declared at _____, this _____ day of _____ 19____, before me.

Signed _____ "

Chart 22.5 - Veterinarian's certificate

Form No. 2

Government veterinarian's certificate to accompany sausage casings to New Zealand:

"I, _____, a duly qualified veterinarian, now employed by the Government of _____, hereby certify that I have no reason to doubt the correctness of the above declaration in any particular. Dated at _____ this _____ day of _____ 19____.

Signed _____ "

(Veterinary Officer in Charge - Meat Inspection Program)

assure casings' origin and the sanitary handling thereof. Furthermore, all casings for export to New Zealand shall first be examined by the inspector, and only those fit for use as sausage containers in official establishments shall be certified. A copy of each certificate shall be filed in the inspector's office.

(b) Poultry Products

Fully cooked poultry products are accepted, provided (1) an import permit is issued by New Zealand Department of Agriculture and a copy of such permit accompanies the shipment; (2) an MP Form 506 signed by an MPI veterinarian shall certify the following:

"The poultry products covered by this certificate have been derived from poultry slaughtered at a processing plant under control of the United States Department of Agriculture, no case of exotic Newcastle disease has occurred in any of the States supplying poultry to the processing plant in the preceding 6 months, and all products were cooked to a temperature of 70 degrees centigrade for at least 15 minutes and immediately sealed in a covering such as cryovac bag or sealed in such a covering prior to cooking."

For shelf-stable canned poultry products, the following statement should be typed on the MP Form 506:

"The poultry products covered by this certificate have been derived from poultry slaughtered at a processing plant under control of the U.S. Department of Agriculture and were cooked to an internal temperature of at least 110° C. for 20 minutes in sealed cans."

inspector may be typed on the certificate as follows:

"It is hereby certified that the sale of the product described herein would not constitute a contravention of the laws of this country."

The statement to be signed by a plant official should be typed on plant stationery as follows:

"It is hereby certified that the following goods were manufactured in this country in accordance with the law. Their sale in this country would not constitute a contravention of such law."

22.67 NIGERIA

Meat and poultry may be exported to Nigeria under special certification.

In addition to MP Form 412-3 or MP Form 506, Nigeria requires two "free sale" certificates, one signed by an MPI inspector and one by a plant official. The one to be signed by an

Description_____

Number of packages_____

Marks and numbers_____

Name of manufacturer_____

Country of manufacturer_____

Date_____Signed_____."

Metric Weights: All immediate and shipping containers for meat and poultry exports must show metric weights only. Avoirdupois or dual weights are unacceptable.

22.68 NORTHERN IRELAND

Poultry Products

Fully cooked poultry products are accepted, provided (1) an import license is issued by Northern Ireland Ministry of Agriculture and accompanes each consignment; and (2) an MP Form 130 is issued by a Federal veterinary inspector with the following statement: "Poultry covered by this certificate received ante- and post-mortem inspection and the product has been heat treated to the requirements of Federal Authority."

22.69 NORWAY

(a) Meat Products

Certificates shall be visaed by consul. Imports by license only. Pork may be exported if the following statement is typed on the reverse side of MP Form 130 and is signed by an official veterinarian: "I certify that the swine from which this pork is derived originated in a State that has been declared free from hog cholera." Since the United States is free of hog cholera, the statement may be routinely provided. Any change in the status of this disease will be promptly communicated.

Casings. The following certification may be given on letterhead stationery: "I certify that the casings herein described were from healthy animals (cattle, horses, swine, sheep, or goats) slaughtered in a slaughterhouse in this country and received ante- and post-mortem veteri-

nary inspection at time of slaughter. The product is declared fit for human consumption. The casings are clean and sound and were prepared in a sanitary manner and do not contain preservatives other than common salt (NaCl), and no coloring or bleaching agent. The barrels were thoroughly cleaned before leaving the plant and have not been used for products harmful to meat.

Tarmsort (Casings)	Antall Kolli (No. of Packages)	Vekt. (Weight)
-----------------------	--------------------------------------	-------------------

Veterinaerens Kontrollmarke Pa Kolli
(Veterinary Inspector's Marks on the
Packages)

Avsender (Consignor)	Addressee (Address)
Mottaker (Consignee)	Bestemmelsessted (Destination)

Fraktmerke
(Shipping Marks)

(Signature)
Kontrollveterinaer
authoriset av.
(Veterinary Inspector
authorized by)

Veterinaedirektoratet mads Gaustad."

(b) Poultry Products

Products with phosphates are not permitted entry. However, MP Form 130 * can be completed without statement on phosphates.

22.70 OMAN

(a) General Requirements.

(1) Export Guidelines. Informa- *
tion provided below specifies *
requirements currently available *
from Oman. To facilitate the *
completion of export requisites *
where current information is *
incomplete, U.S. exporters may wish *
to follow the trend toward uniform *
import requirements in the Gulf *

* by using, as guidelines, the
 * regulations set forth in Section 22.77
 * of the Arabian

* (2) Labeling Meat and poultry
 * products must bear the following in
 * addition to those labeling features
 * required in the United States.

* a. Net weights,
 * b. Each product is permitted
 * and must be clearly stated on

* c. Production date (slaughter,
 * packaging or freezing dates). Spell
 * out or abbreviate name of month:
 * (Jan. plus year),

* d. Expiration date. Spell out or
 * abbreviate name of month: (Jan.
 * plus year),

* 1. Expiration statement from
 * production date acceptable.

* 2. Maximum expiration time:
 * Poultry, one year; meat, no fixed
 * time, however, one year is
 * suggested.

* (b) Certification.

* (1) Export certificate. Issue MP
 * Form 130.

* (2) Consignee. Product must be
 * consigned directly to Oman.

* (c) Islamic Requirements.

* (1) Islamic Centers. Copies of
 * the list of Islamic Centers are
 * available from RD or ECS.

* (2) Certificate of Islamic
 * slaughter In addition to FSIS
 * certification, the exporter must
 * obtain a certificate of Islamic
 * slaughter from a member of an
 * Islamic Center. The certificate
 * must be endorsed by the U.S.-Arab
 * Chamber of Commerce or by an Oman
 * Consulate. The telephone number of
 * the U.S.-Arab Chamber of Commerce is
 * (202) 293-3162

22.71 PAKISTAN

Poultry Products

* Before MP Form 130 is issued, the
 * inspector must assure that all speci-

fications in the bids are met, and
 poultry was slaughtered by means
 acceptable under Moslem law. The fol-
 lowing statement, in conformity with
 Moslem law, shall be typed on the cer-
 tificate:

"The poultry covered by this certi-
 ficate was slaughtered by means of a
 sharp knife cutting through the skin,
 jugular vein, and trachea to result in
 thorough bleeding out of the carcass
 in preparation for dressing and evis-
 ceration."

22.72 PERU

Meat Products

Unsalted stomachs. See 22.17(b).

22.73 POLAND

(a) Certification

All certificates and certification
 statements accompanying product for
 export to Poland must be signed by
 MPI veterinarians.

NOTE: Exotic diseases mentioned
 below refer to those diseases which
 may affect the specific animals from
 which the meat or meat products were
 derived; e.g., foot and mouth disease,
 rinderpest, African swine fever, hog
 cholera, swine vesicular disease
 which do not currently exist in the
 United States. If an exotic disease
 should occur in the U.S., VS will
 immediately notify FSIS and that
 information would be transmitted to
 field personnel.

(1) Meat Products. The following
 statement should be typed on reverse
 of MP Form 130: "I further certify:
 that the meat is derived from animals
 which originate from areas which are
 free of exotic disease."

(2) Lard. The following statements
 should be typed on reverse of MP
 Form 130: I further certify that:
 a. "The lard is derived from
 animals which originate from areas
 which are free of exotic disease."
 b. "The lard contains up to (List
 antioxidants and amount used).

- c. "The lard has a peroxide value (lEA) which is not greater than 2."
- d. "The Kreis test performed on the lard was negative "
- e. "The color and odor of the lard meet the specifications described in Section 319.702 of the Regulations."

(3) **Technical Animal Fat.** Technical animal fat may be certified in accordance with Section 351.3 of the Meat and Poultry Inspection Regulations. The following statement should be typed on reverse of MP Form 87. "I further certify that the technical animal fat is derived from animals which originate from areas which are free of exotic diseases."

(b) Permitted Antioxidants

- a. Propyl gallate, octyl gallate, dodecyl gallate, or any combination of two - up to 100 mg/kg.
- b. Butylated hydroxyanisole (BHA) - up to 100 mg/kg.
- c. Any combination of gallates with BHA - up to 100 mg/kg.
- d. Natural and synthetic tocopherols - up to 200 mg/kg.

(c) Labeling

Shipping containers must bear all mandatory labeling information including amount and types of antioxidant used. With the exception of permitted antioxidants, lard may be exported to Poland in ship tanks under the same requirements outlined in Section 22.39(a)(2)(vii) of the Meat and Poultry Inspection Manual for Great Britain. A placard secured to the hatch should bear antioxidant data and the export stamp. Export certificate shall be visaed by consul of that country.

**22.74 PORTUGAL
Meat/Poultry Products**

They are subject to laboratory testing by the Portuguese Government for organisms harmful to human and/or animal health; however, a special certification is not required. Issue

only MP Form 130 for meat and poultry products. *

22.74-A QATAR *

(a) General Requirements. *

(1) **Export guidelines.** Information provided below specifies requirements currently available from Qatar. To facilitate the completion of export requisites where current information is incomplete, U.S. exporters may wish to follow the trend toward uniform import requirements in the Gulf States by using, as guidelines, the standards set forth in Section 22.77 for Saudi Arabia. *

(2) Labeling. *

(i) **Fresh/frozen.** Fresh/frozen meat and poultry products must bear the following in addition to those labeling features mandatory in the United States: *

1. Bilingual labels, *
2. Production date (freezing or packaging dates). Spell out or abbreviate name of month: (Jan. plus year). *
3. Expiration date. Spell out or abbreviate name of month: (Jan. plus year). Acceptable alternatives and features are: *
- a. No fixed expiration time periods set, *
- b. Printed production date followed by statement "Product good for (time period) from date of production". *
4. Currently, Islamic slaughter statement on consumer package not required. *

(3) Packaging. *

(i) Vacuum packaging not required. *

(4) Product arrival. *

(i) **Frozen.** It is recommended that frozen product arrive in Qatar a minimum of 6 months prior to date of expiration. *

(b) Certification. *

(1) **Export certificate.** Issue MP Form 130. *

* (c) Islamic Requirements

* (1) Islamic Centers. Copies of
 * the list of Islamic Centers are
 * available from RD or ECS.

*

* (2) Certificate of Islamic slaughter

* ter

* In addition to FSIS certification,
 * the exporter must obtain a
 * certificate of Islamic slaughter
 * from a member of an Islamic Center.
 * The certificate must be endorsed by
 * the U.S.-Arab Chamber of Commerce or
 * by a Qatar Consulate. The telephone
 * number of the U.S.-Arab Chamber of
 * Commerce is (202) 293-3162.

*

* (d) Qatar Import Inspection.

* (1) Laboratory sampling. Random
 * samples are routinely collected on
 * meat and poultry product entering
 * Qatar. Product examined for:
 * a. Pesticides,
 * b. Salmonellae and other
 * pathogenic bacteria,
 * c. Total bacteria counts,
 * d. Heavy metals,
 * e. Species identification tests
 * for pork tissue in formulated
 * product.

22.75 ST. VINCENT ISLAND

Meat Products

Add to export certificate covering
 fresh, cured, or smoked products, the
 statement "The United States is free
 from foot-and-mouth disease."

22.76 SALVADOR (EI)

Meat Products

Export certificate must be visaed by
 consul of that country.

22.77 SAUDI ARABIA

(REFERENCE FSIS DIRECTIVE 9430.1,
 10/10/85.)

products exported to Singapore. Product frozen for more than 6 months will not be allowed entry into Singapore. The 6 months will be calculated from the first of the month (based on the oldest slaughter date in the shipment) to the date of arrival in Singapore.

(c) Canned Products

The following additional statements must be typed on export certificate for canned meat and poultry products:

Products were (1) manufactured according to standard canning processing technique and were subjected to a temperature of not less than 100° C. for not less than 90 minutes; (2) prepared with meat from animals or birds subjected to ante- and post-mortem examinations and found free from disease; (3) not treated with chemical preservatives or other foreign substance injurious to health; (4) sanitarily prepared, processed, and packed under veterinary supervision, and are fit for human consumption.

NOTE: Any processing variation from the 100° C. for not less than 90 minutes should be submitted to the Primary Production Department, Government of Singapore, for approval. Shipments must not be made until such approval is obtained.

Canned pork and beans which are not amenable to the Meat Inspection Act may be certified under Part 350 of the regulations (Certification Service). The product shall be accompanied by a declaration from the manufacturer stating: (1) The meat content of the product (including fat); (2) That the product has been prepared from sound and wholesome ingredients; (3) That the product has been heated to _____(degrees centigrade) for _____ minutes; (4) That every portion of the contents has been heated to a temperature of not less than 100° C.

The above declaration shall be countersigned by an MPI veterinarian stating that he has no reason to doubt the truth of the manufacturer's declaration.

22.78 SINGAPORE

(a) Certification

The same veterinarian must sign all certificates and supplementary statements. DVM or equivalent degree should be placed after signature. Issue MP Form 148 for both meat and poultry products plus appropriate regular export certificate. The weights and numbers of cartons should be divided to accurately reflect the amount of product originating from each establishment when product originates from two or more establishments.

(b) Slaughter Dates

Slaughter dates with month (spelled out) and year must be shown on MP Form 148 and on shipping cartons of all fresh/frozen meat and poultry

ration and that he is satisfied with the cleanliness and manufacturing practice of the processing plant. This certificate may be typed on company letterhead. Veterinarian countersigning certificate should include "MPI Veterinarian" under his signature. An MP Form 130 will not be issued.

22.79 SPAIN

Meat Products

(1) Fresh (chilled) meat may be imported only in the form of sides or quarters in wrappers which have been approved by the Spanish Directorate General for Public Health. Exporters may obtain approval of such wrapping materials through their Spanish inspectors. Time from slaughter to unloading of fresh meat at Spanish ports may not exceed 15 days.

(2) Frozen meat in cartons (cuts or boneless) must show slaughter dates. Slaughter to date of unloading at Spanish ports shall not exceed 3 months. Weight on cartons in metric units.

(3) Pork. Pork and pork offals, including tongues, will be accepted provided they are consigned only to one of the following Spanish ports (in order of preference): Santander, Valencia, or Barcelona. Both freezing date and freezing temperature must be indicated on export certificate.

(4) Consumer size packages must bear labels printed in Spanish, and must show:

1. Date of packaging or storage termination date. This must not be coded.
2. Weight in metric units.
3. Lot number or other identification of manufacture. This may be coded.
4. Country of origin, as "Product of USA."
5. Directions for preparation or use of the product, if applicable.

6. For product marketed under distributor's name or trade name labels must show Est. No. of product plant preceded by "Manufactured by".

(5) Beef tripe Must be washed scalded without chemicals.

(6) Certification. Issue MP Form 130. Face of certificate must show:

1. Name, address, and Est. No. slaughter or processing plant.

2. Means of transportation - name of vessel.

3. Name and official title of veterinarian signing certificate (beneath signature).

The following statement shall be typed on the reverse of MP Form 130:

"I certify that the meat described herein is from animals slaughtered at a legally-authorized slaughterhouse in the United States and were subject to official ante- and post-mortem inspection. The meat is fit for human consumption and has not been treated with any unapproved additive nor with any other substance that is noxious to human health. It has been handled under the best hygienic and sanitary conditions and is fit for human consumption. It does not represent a hazard of spreading epizootic disease."

(Signature)

Official Veterinarian

Name and Title

22.80 SURINAM

Poultry Products

Chicken Feet. They may be exported provided each shipment is accompanied by MP Form 130 with the following certification:

"This certifies that the poultry feet specified above have been processed in compliance with the Regulations Governing the Inspection of Poultry and Poultry Products (9 CFR Part 381) as promulgated by the Secretary of Agriculture, and are sound and

wholesome so far as can be determined by external examination, and are from chickens of U.S. origin."

* 22.81 SWEDEN

* (a) General Requirements.

* (1) Certificates.

* (i) Signature on certificates.

All certificates accompanying product shall be signed by an MPI veterinarian.

* (ii) Product description.

* 1. Product described on export certificate shall be identified with establishment number of producing plant.

* 2. Different products from the same EST/PLANT shall be identified in separate lots on separate lines of certificate.

* 3. Products from more than one plant for listing on one certificate shall have weights, number of cartons and product description specified for each respective EST/PLANT number and shall be in accordance with 2 above.

*

* (2) Refrigeration. Shippers must arrange for product to be handled between exporting establishment and Swedish recipient, under continuous conditions of refrigeration and/or freezing between +4° C. and -20° C. (39°F. to -4°F.).

* (3) Labels.

* (i) Permit. For product not previously exported to Sweden, product description and labels should be submitted to contemplated Swedish importer.

* (ii) Additives. The Swedish Food Act defines food additives as "enrichment which is intended to be added to a foodstuff to increase its nutritional value, as well as any other product or substance which is intended to be added to a foodstuff

in order to influence its durability, consistency, color, taste, or flavor, or to add any other specific quality to the foodstuff, unless the enrichment, product, or substance is not in itself a foodstuff."

(4) Swedish import inspection. *

Import inspection in Sweden will include a veterinary inspection of samples selected at random from each lot and submitted to an approved laboratory for bacteriological examination, e.g., Salmonellae. Salmonellae positive sample analyses may result in rejection of the shipment.

(b) Meat Products. *

(1) Health examination. A medical examination is required for all personnel engaged in the direct handling of meat in boning and cutting rooms of plants exporting to Sweden. The medical examinations must be performed at the time of hiring, and at least once a year thereafter, and whenever a disease is suspected. Primarily, the medical examinations should show that the personnel are free from disease or infection which can be transmitted to man via food. *

The MPI veterinarian who signs the export certificate must verify from medical certificates on file, that the plant is still engaged in conducting the required medical examinations. This verification must take place within 2 months of the date a consignment is certified for export.

For fresh/frozen cut or deboned meat, the following statement must be typed in the "Remarks" section of MP Form 130: "The products covered by this certificate have been handled by personnel subject to medical examination according to the Swedish Food Administration Implementing Ordinance SLV FS 1978:11. The cutting, packaging, and general treatment of the *

... have been accomplished in acceptable and controlled facilities recording 10° C. (50° F.)." This statement nor the examination are needed for carcasses covering whole, half, or carcasses.

* (2) Hormones In addition to the statement in (b)(1) above, beef, lamb, meat byproducts, meat products and veal from dressed carcasses weighing more than 220 pounds must have the following statement typed in the "Remarks" section or on the reverse of MP Form

* "I certify, to the best of my knowledge and judgment, that the meat and/or meat food products identified on this certificate were derived from livestock which have never been fed or administered growth promoting hormones, and that the animals, from which such meat and/or meat products were derived, were accompanied to the slaughtering establishment by certification by a veterinarian as specified for shipments destined to Sweden."

This certification may be issued, provided a satisfactory method is developed for identifying and certifying specific lots of animals delivered to the plant for slaughter. Advance arrangements must be made between plant management and the veterinarian in charge for the identification of lots intended for Sweden prior to ante mortem inspection.

Synovex-H, Synovex-S, Ralgro, and MGA are used as growth promoters in cattle in the United States.

* (3) Pork.

* (i) Fresh/frozen.

Fresh/frozen pork must be derived from swine which were born and raised in the United States or Canada. One of the following statements which is applicable shall be typed on MP Form 130:

1. "The pork covered by this certificate has been stored for at least 20 days at an internal temperature not exceeding 18° C (0° F.)." Product covered by this statement must have been under Program control, in rooms or compartments secured with an official lock or seal.

2. "The most recent portion of this frozen pork shipment was frozen on (month - spelled out, day and year)." To support this statement, the cold storage warehouse records must be made available to the inspector to substantiate the most recent date when the last portion of the pork lot intended for export to Sweden was frozen. If data relative to when last portion of lot was frozen is not available, then the date the frozen pork is presented for export certification must be used as the most recent freezing date. Sweden will require subsequent cold storage of the pork at the time of importation into Sweden if 20 days have not elapsed since most recent freezing date.

(ii) Cooked pork. The following statement for cooked pork shall be typed on MP Form 130: "I certify that the pork products identified herein have been heated to an internal temperature adequate for destroying live trichinae."

(4) Horsemeat. Issue MP Form 414-3 with the following statement typed on the reverse thereof and signed by the same MPI veterinarian signing face of certification: "I certify that the horsemeat/byproducts described herein:

a. Is derived from animals born, raised, and slaughtered in the United States,

b. Has been prepared in hygienically acceptable and temperature-controlled facilities not exceeding 10° C. (50° F.), and

c. (for cut-up horsemeat only) Has been handled by personnel

subject to medical examination in accordance with Swedish Food Administration Implementing Ordinance SLV FS 1978:11." (See (b)(1) above).

inside." Poultry products entering Switzerland may be tested for Salmonellae. Salmonellae positive samples may result in rejection of shipment. *

(c) Poultry Products.

Only cooked poultry and cooked poultry products may be exported. The following statement must be typed in the "Remarks" section of MP Form 130:

"I certify that the poultry product described herein has been cooked to a temperature of not less than 162° F. for 10 minutes." Swedish officials will accept poultry products cooked to an internal temperature of 160° F. as required by regulations (381.150). Research has proven that when cooked poultry is removed from the cooker at 160° F., its internal temperature continues to rise for several minutes and then drops very slowly to room temperature. Therefore, the above certification can be made on this basis. MP Form 130 must be signed by an MPI veterinarian.

Health examinations for workers preparing cooked poultry products are not required.

22.82 SWITZERLAND

(a) Meat Products

Assure that slaughter dates for fresh/frozen and packing dates for processed product are shown on MP Form 122. (Do not attach certificate to carton.) Form MP 141 may be issued for high quality beef upon request by exporter.

(b) Poultry Products

(1) Certification. Issue MP Form 130 and MP Form 121 (Block "b" which is located in Section IV must be checked). Slaughter dates are to be shown on sanitary certificates. Copies may be inserted into a moisture-proof bag and placed into one of cartons marked "copy of certificate

(2) Phosphates. They are permitted only in cooked poultry products.

(c) Labeling

U.S. labeling requirements, including "Product of USA" and the statements on storage temperatures ("Keep Refrigerated," "Keep Frozen," etc.) fully apply to product prepared for export. In addition, all chilled and frozen meat products must have the packing date shown on each package. (Although slaughter or production dates are required on MP Form 121, the packing dates are not required on packages of poultry). Expected shelf life (end-of-use date) must be indicated only on chilled (unfrozen) consumer-size packages having a net weight of 4.4 lbs. (2 kg.) or less

22.83 TRINIDAD OR TOBAGO

(a) Meat Products

They must not contain mucous membranes, organs, or parts of the genital system, intestines, (black gut), spleens, udders, lungs, or other animal parts not commonly sold as food articles.

(b) Poultry Products

Importation of poultry to Trinidad or Tobago is allowed only under permit. The conditions of such permit are:

1. Products must be from approved country.

2. Poultry must be in eviscerated form.

3. Certification of inspection by USDA (MP Form 130).

4. Poultry carcasses will be acceptable with edible giblets; i.e., heart, liver, and gizzard, cleaned and put back into the carcasses.

5. Poultry giblets in bulk will also be accepted if accompanied by certification.

22.83-A UNITED ARAB EMIRATES

(U.A.E.)

(a) General Requirements.

(1) Labeling.

(i) Meat and poultry products

(including canned) Must bear the following in addition to those labeling features mandatory in the United States

1. Bilingual labeling,

2. Statement of Islamic slaughter on consumer packages,

3. Metric net weights. Lettering and numbers for unit metric weight must also be in Arabic.

4. Production date (slaughter, packaging, or freezing dates). Spell out or abbreviate name of month: (Jan. plus year),

5. Expiration date. Spell out or abbreviate name of month: (Jan. plus year),

6. a. Specific date of expiration must be stated: statement listing expiry date from date of production not acceptable

b. No fixed expiration time periods set: nine months is suggested as a reasonable expiration date for frozen poultry and one year for frozen meat.

c. Product must arrive in the U.A.E. at least 3 months before expiration date.

(ii) Exceptions for product consigned to Dubai:

1. English only labels acceptable.

2. Islamic slaughter statement not required on consumer package.

(iii) Canned goods.

1. Expiration date must be embossed on metal lid. Dates printed on labels or stickers are not acceptable.

(2) Packaging. Poultry must be packaged in clear plastic.

(b) Certification.

(1) Export certificate. Issue MP Form 130.

(c) Islamic Requirements.

(1) Islamic Centers. Copies of the list of Islamic Centers are available from RD or ECS.

(2) Certificate of Islamic slaughter. In addition to FSIS certification, the exporter must obtain a certificate of Islamic slaughter from a member of an Islamic Center. The certificate must be endorsed by the U.S.-Arab Chamber of Commerce or by an United Arab Emirates Consulate. The telephone number of the U.S.-Arab Chamber of Commerce is (202) 293-3162.

22.84 VENEZUELA

(a) Meat Products

Pork. The following certification in Spanish and English may be added to the reverse of the regular export certificate or on letterhead stationery:

"I certify that the product shipped under the certificate has been processed by a method, approved by the United States Department of Agriculture, which is adequate to destroy any possible live trichinae. I further certify that this product has been held in a freezer for a period of not less than _____ hours at a temperature not in excess of _____° F."

(Signature)

"Yo certifico que el producto enviado y amparado por este certificado ha sido procesado por metodos aprobados

por el Departamento de Agricultura de los Estados Unidos y que son adecuados para destruir cualquier trichina que pudiera existir. Asimismo certifico que este producto ha sido mantenido en un congelador durante un periodo no menor de _____ horas y a una temperatura no excediendo _____ grados Fahrenheit."

In addition to times and temperatures shown in section 318.10 of the regulations, Venezuela will accept frozen pork product which has been treated for destruction of trichinae by alternate approved methods for internal product temperature as follows:

- 0° F. for 96 hours
- 5° F. for 72 hours
- 10° F. for 56 hours
- 15° F. for 43 hours
- 20° F. for 30 hours
- 25° F. for 17 hours

Inspector signing export certificate will enter time and temperature used in both English and Spanish certifications shown above.

(b) Poultry Products

Issue MP Form 506.

22.85 WESTERN SAMOA

Poultry Products

Only veterinary inspectors will issue MP Form 506 for ready-to-cook poultry.

The following conditions will apply to poultry products to be exported to Western Samoa:

a. The MP Form 506, must originate from within one of the 50 States in the USA.

b. The export certificate must be signed by an MPI veterinarian and may be issued on the condition that no officially-noted outbreak of Newcastle disease exists within a 40-mile radius of the premises where the flock originated.

22.86 YUGOSLAVIA

Meat Products

Issue MP Form 412-3, and the additional certification typed on USDA/FSQS letterhead stationery as follows

VETERINARY CERTIFICATE

Certificate No. _____

(Serial No. of accompanying MP Form 412-3).

a. The (product name) described herein comes from (species) which were inspected before and after slaughter and were found free of contagious diseases.

b. The preparation and freezing of the product described herein has been accomplished under conditions acceptable to USDA.

c. The products in this shipment are suitable, after defrosting, for manufacture into products for human consumption.

(Signature) _____
Veterinary Medical Officer

*
*

CHEMISTRY

Subpart 23-A

(Regs. M-318; P-Subpart O)

23.1 CHEMISTRY LABORATORIES

(a) Type of Analysis

Chemistry laboratories conduct general chemical analysis of meat and poultry products to determine moisture, protein, salt, nitrite, nitrate, total fat, animal fat, etc. They also analyze products for chemical residues, nonmeat or nonpoultry food additives, and preservatives. Various nonfood compounds and packaging materials used in federally inspected plants are reviewed by the FSIS Food Ingredient Assessment Division (FIAD) Laboratory in Beltsville, MD. See Subpart 17-D for Packaging Materials and see Subpart 8-F for Nonfood Compounds.

(b) Type of Laboratories

(1) FSIS Science Field Service Laboratory. The FSIS Field Service Laboratory is the official laboratory that analyzes meat and poultry samples selected and submitted by the USDA Inspector.

Addresses and telephone numbers and designated geographical service areas of these laboratories may be found in the Meat and Poultry Inspection Directory.

(2) Approved Quality Control Laboratory. A plant or commercial laboratory approved by MPITS Processed Products Inspection Division to analyze samples in conjunction with approved quality control systems.

(3) Accredited Laboratory. A non-Federal Chemistry Laboratory accredited by FSIS Science Chemistry

Division only for analysis of water, protein, salt, and fat and/or for certain specific chemical residues in meat and poultry products.

The inspector must use results from an Accredited Laboratory with the same authority as from a FSIS Field Service Laboratory.

Names, addresses, and telephone numbers of Accredited Laboratories are listed in the Meat and Poultry Inspection Directory.

(c) Types of Samples

(1) Verification Samples. When a plant is under Approved Quality Control, verification samples are submitted to the Field Service Laboratory to determine accuracy of such control.

(2) Split Samples. Split samples are two or more sample units, identified with the same three digit sample numbers, that have been selected from the same carefully prepared randomly selected meat or poultry food sample so that each split sample will provide equivalent chemical analytical results.

When an establishment requests the inspector to use an accredited laboratory in lieu of an FSIS Field Service Laboratory for chemical analysis of a meat and poultry food product, the inspector must select split samples and provide one portion of the split sample to the accredited laboratory and retain the remaining portion. Unless otherwise directed the inspector should randomly select 20 percent (1 of 5) of the retained split samples to send to the FSIS Field Service Laboratory to determine the continued analytical capability of the accredited laboratory. The remaining retained split samples may be returned to the establishment management after having received the results from the Accredited Laboratory and after the

split sample has been selected for the FSIS Field Service Laboratory.

(3) Dual Purpose Samples. These serve both as split samples and verification samples. See 18.24 (1), Option 2.

(4) Correlation of Results. Field Service Laboratories shall summarize split sample results on a biweekly basis, using FSIS Form 6200-2 (Meats) or 6200-3 (Residues). Send one copy to Science Chemistry Division.

Accredited Laboratories, if a plant laboratory, shall summarize official sample results and report them biweekly to Science Chemistry Division on the appropriate FSIS form which will also be signed by the inspector.

The two sets of results will be matched by computer to provide an ongoing check of the Accredited Laboratory's continued analytical capability.

When unacceptable analytical capability is determined, and corrective actions are not taken, the Regional Director (RD) will be advised and the Accredited Laboratory will be removed from the Meat and Poultry Inspection Directory.

The official use of Accredited Laboratory's results is at RD's discretion.

Because split samples are only to determine the continued analytical capability of an Accredited Laboratory, such sample results are not routinely returned to the inspectors.

3.2 SAMPLE SELECTION

a) Meat or Poultry Product

All samples should be randomly selected and adequately represent batches and/or lots.

For chemical analysis, select approximately a 1-pound sample (but not less than 12 ounces), except where otherwise specified for

certain products and procedures, such as in cooked sausage having to comply with the 30 percent fat limitation, where a sample consists of three 1-pound units selected over a production lot.

A sample may be a whole unit, more than one unit, or various portions of a unit. A unit is a single processed piece (can, package, etc.).

(1) Packaged Product. If the unit weighs less than 12 ounces, select enough units to provide a sample weighing approximately 1 pound. If the sample weighs more than 1½ pounds, either send the entire unit or chop the entire unit as noted in Section 23.3(d).

(2) Canned Product.

(i) Unopened (all types). Select one unopened unit. If the unit weighs less than 12 ounces, select enough units to provide a sample weighing approximately 1 pound.

(ii) Opened (further processed, i.e., slicing or bulk packaging).

Randomly select from various areas of one unit, enough sections or slices to provide a sample weighing approximately 1 pound.

(b) Nonmeat-Nonpoultry Items

Articles known to be unacceptable should not be selected. Laboratory analysis of such articles usually does not serve a useful purpose.

(1) Ingredients. Dry mixtures should be selected and submitted in a smaller size plastic film bag (approximately 3 x 6 inches flat) and the bag should be about three quarters filled.

Submit each liquid sample in 4-oz., narrow-mouth plastic bottle

(2) Nonfood Compounds.

Generally, these compounds need not be sampled. The inspector will check the "List of Proprietary

* Substances and Nonfood Compounds" to
 * see if compounds are listed. If
 * there is any doubt about a material
 * listed in the "List of Proprietary
 * Substances and Nonfood Compounds,"
 * the inspector should contact
 * SCI-FIAD at (301) 344-2566 before
 * sending a sample. The inspector may
 * call collect if FTS is not available.
 * SCI-FIAD will advise the inspector on
 * proper sampling technique and shipping
 * instructions. (See Subpart 8-F for
 * Nonfood Compounds).

* (3) Packaging Materials.

* Generally, these materials need not
 * be sampled. Plant management must
 * maintain a file containing guaranties
 * for all food contact packaging
 * materials in the establishment. The
 * inspector will permit use of materi-
 * als on the basis of such guaranties
 * unless there is a specific reason to
 * doubt the acceptability of the
 * materials.
 * If there is any doubt about the
 * acceptability of a food contact
 * packaging material, the inspector
 * should contact SCI-FIAD at
 * (301) 344-2566 before sending sample.
 * The inspector may call collect if FTS
 * is not available. SCI-FIAD will
 * advise the inspector on proper
 * sampling technique and shipping
 * instructions. (See Subpart 17-D for
 * Packaging Materials).

* (4) Packaging Monitoring Program.

* SCI-FIAD conducts a monitoring
 * program involving a series of
 * views of official
 * lected on a random
 * at the selected
 * requested to
 * a specified
 * materials
 * is provided
 * information
 * ors, FIAD
 * id requests
 * from plant
 * pliers to
 * applicable

(c) Biological Residues

See Subpart 11-E.

23.3 SAMPLE PREPARATION**(a) Fresh Product**

Fresh products - such as pork sausage, hamburger, MSS, MDP, etc., must be preserved either by sending the sample to the laboratory frozen, or by adding approximately 10 drops of formalin to the one pound sample and mixing it thoroughly by kneading the plastic bag after closing. Adding more than 10 drops of formalin is detrimental to the sample. The sample form must carry a statement such as "formalin added" under block number 13.

(b) Cooked Sausage or Emulsified Product (See 18.24(g)(2))

Select samples before being vacuum packed or immediately remove samples from the vacuum pack and place in the plastic sample bag. For vienna or other cooked sausage packed in media, select the sample before canning. Each 1-pound unit will be packed in a separate polyethylene bag. Identify each plastic bag with a tag wrapped and secured around the bag by a rubber-band showing the establishment and sample number, and the designation ("1 of 3," "2 of 3," or "3 of 3") for each of the 3-pound samples. Split samples of emulsified cooked sausage products, such as bologna and franks, may be selected by taking adjacent slices of bologna or adjacent franks. Because this class of product is highly emulsified there is no need to further prepare the sample.

*** (c) Canned Product**

* No preparation of samples needed.
* Send whole unit as in Section 23.2(a)
* (2)(i). If split samples are
* required, the canned item must be
* opened and ground as in (d) below.

(d) Non-emulsified sample and whole cuts

No preparation of sample is needed. Send whole unit as in Section 23.2. If split samples are required, or if a single sample is required and the inspector has been requested not to send in a whole sample unit, chop non-emulsified samples such as ground beef, pork sausage, bacon, salami, etc., and whole cuts such as hams, picnics, (remove skin and bone from any hams or picnics as required) briskets, etc., three times carefully mixing with a spatula between each chopping. High fat meat samples, (i.e., bacon or pork sausage) must be nearly frozen before chopping. Follow the above procedures without unnecessary delay and without using equipment or material that may absorb moisture or juices. Retain any liquids and reincorporate them into the product. For samples weighing more than 5 pounds proceed as follows:

Option A

(i) If a bowl chopper is available, chop the entire sample for approximately 1 minute.

(ii) Reduce sample to approximately 2 pounds by quartering as follows:

(a) Divide sample in chopping bowl into quarters.

(b) Remove alternate quarters.

(c) Chop for approximately 1 minute.

(d) Repeat quartering until sample is reduced to about 2 pounds, then pass sample twice through a meat chopper with 5/64" plate, mixing between each chopping. Send approximately a 1 pound sample of the final, mixed, chopped sample to the laboratory for analysis.

Option B

(i) Grind the entire sample as quickly as possible to minimize the loss of moisture by evaporation.

* (c) Reduce sample to approximately 2 pounds by quartering as follows:

- * (1) Divide sample into quarters
- * (2) Remove alternate quarters
- * (3) Regrind the remaining sample
- * (4) Repeat quartering until sample is reduced to about 2 pounds, then pass sample twice through a meat grinder with a 5/64" plate, mixing between each grinding. Send the final, mixed ground sample to the laboratory for analysis.

* (e) Dry Meat and Poultry Products

No preparation of sample is needed. Send whole unit. If split samples are required, coarsely dice and then chop dry products, such as jelly, using a blender or homogenizer, for 15 to 30 seconds to obtain a finely divided sample.

* (f) Nonmeat-Nonpoultry Items

When sampling cereals, spices, and similar materials, the inspector should examine a sufficient quantity of the container's contents to determine whether the material is uniform throughout and that the sample represents the lot.

23.4 FORMS

* (a) Food Chemistry Samples Submitted to FSIS Field Service Laboratories

* The FSIS Form 6200-1 is used to submit each food chemistry sample.

- * (1) Identify each split sample with its three digit sample number by entering that number in Block 16, and check analysis required in Block 17 of FSIS Form 6200-1. If calculated values of added water or added substances are required, then also check Section 12, "Analyses Requested and Findings," either Block 04, 05, or 06 as appropriate. Also write the words "SPLIT SAMPLE" at the bottom of Block 13.

- * (2) When samples of product with nonfat dry milk, monosodium glutamate, isolated soy protein, soy protein

concentrate, soy flour, hydrolyzed plant protein, gelatin, etc., are submitted, the amount of each additive in the finished product must be indicated in Block 15 of FSIS Form 6200-1.

(3) Luncheon and Potted Meat The percentages of tripe, tongues, and hearts must be recorded in Block 13 of FSIS Form 6200-1, since the percentages of such ingredients effect the water protein ratio of these products.

(4) Verification Samples. Identify by entering the words "Verification Sample" at the bottom of Block 13 of the FSIS Form 6200-1.

(5) If the establishment is under a total quality control, then enter the letters "TQC" at the bottom of Block 13 of the FSIS Form 6200-1.

(6) If the sample is a dual purpose sample as in Section 18.24(i) Option 2, then identify this sample by entering the words "Split/Verification Sample" at the bottom of Block 13. Enter the three digit sample number in Block 16 of the FSIS Form 6200-1. If the calculated values of added substances or added water are required, then also check Section 12, "Analyses Requested and Findings," either Block 04, 05, 06 as appropriate.

(b) Food Chemistry Samples Submitted to an Accredited Laboratory (moisture, protein, fat, and salt determinations only)

(1) Use one FSIS Form 6200-1 to submit each food chemistry sample sent to an Accredited Laboratory. Enter the three digit sample number in Block 16 and check analysis required in Block 17. If the calculated values of added substances or added water are required, then also check Section 12, "Analyses Requested and Findings," either Block 04, 05, or 06 as appropriate.

* (2) When samples of product with
 * nonfat dry milk, monosodium
 * glutamate, isolated soy protein, soy
 * protein concentrate, soy flour,
 * hydrolyzed plant protein, gelatine,
 * etc., are submitted, the amount of
 * each additive in the finished
 * product must be indicated in
 * Block 15 of FSIS Form 6200-1.

* (3) Luncheon and Potted Meat.
 * The percentage of tripe, tongues,
 * and hearts must be recorded in
 * Block 13 of FSIS Form 6200-1, since
 * the percentages of such ingredients
 * effect the water portein ratio of
 * these products.

* (c) Proprietary Mixtures Submitted
 * to FSIS Field Service Laboratories
 * When submitting samples of
 * proprietary mixtures for analysis,
 * show on the FSIS Form 6200-1,
 * Block 13, the manufacturer's name
 * and address, ingredients list as
 * shown on shipping containers, and
 * purpose for which the mixture is
 * intended.

* (d) Residue Chemistry Samples
 * Submitted to FSIS Field Service
 * Laboratories
 * Use FSIS Form 6000-1 to submit
 * residue sample.

* 23.5 SHIPPING OF SAMPLES

* Exercise care in preparing,
 * packaging, and mailing samples.
 * Samples may be mailed any day,
 * providing postal service is availa-
 * ble at time of mailing. See FSIS
 * Directive 10,600.1 dated 10/6/83.

* (a) Preparation of Samples for Shipping

* Place approximately 1 pound of
 * sample in a plastic bag. No paper
 * or absorbant material should be placed
 * in the plastic bag with the sample.
 * Close the top of the bag by twisting
 * it, secure it with several loops of a
 * rubber band, and then fold the twisted
 * end over and secure that with several
 * loops of the rubber band. Place the

sample bag in a second plastic bag *
 and again close with a rubber band *
 in the same manner. Leave some space *
 in the bag around the sample to *
 permit expansion of sample without *
 splitting the plastic bag if the *
 sample is frozen. Do not use staples *
 to either close the sample bag or to *
 attach the sample form to the sample *
 bag. *

Use a rubber band to attach a tear *
 strip from the completed FSIS *
 Form 6200-1 to identify the double *
 bagged sample. Place the remainder *
 of the FSIS Form 6200-1 in a plastic *
 bag and submit along with the sample. *
 If there is extra room in the sample *
 shipping container, add padding so *
 that the sample will be protected *
 during shipping. *

(b) Unsatisfactory samples *

When plastic sample containers are *
 broken, torn, or otherwise *
 perforated, the sample is useless *
 for analytical work. *

Since decomposed or damaged *
 samples adversely affect the *
 accuracy of analytical results, they *
 will not be analyzed. FSIS Field *
 Service Laboratory personnel will *
 assist inspectors in developing *
 satisfactory mailing procedures by *
 reporting samples arriving in *
 unsatisfactory condition. *

(c) Containers

Fiber cartons for mailing samples *
 are stocked at regional offices. An *
 adequate supply of sample containers *
 and cartons shall be available at *
 each plant. When samples do not *
 occupy all the space in a container, *
 fill with paper or other lightweight *
 packaging material to help avoid *
 damage during mailing. *

(d) Mailing Labels

MP Form 13 which is a reversible *
 mailing label or shipping tag, must *
 be used for perishable or priority *
 samples. For other samples,

When Form 13 is used (1) type or print the name and address of the appropriate laboratory on the "city mail--perishable" side and the return address on the reverse, (2) securely attach the label to the package, and (3) deposit the package at a local post office.

When AD Form 11-S or AD Form 414-S is used, (1) type or print the name and address of the appropriate laboratory on one form and the return address on another, (2) securely attach both forms to the container, and (3) close and tie the container ensuring the laboratory address is visible. Mailing addresses are in the Meat and Poultry Inspection Directory. Do not send samples air express unless the sample is a special or urgent sample.

23.6 SPECIAL SAMPLES

When a sample is sent to the laboratory for special purposes such as investigational samples, make a notation on the form in Block 13 to that effect. If applicable, make reference to a letter or other communication regarding the special status of the sample. If a notation does not appear on the form to indicate special handling, the sample will be given the usual analysis for its class of product.

(a) Reimbursable

Identify each sample submitted under a reimbursable program, (i.e., Food Inspection Service, Certification Service, specification work performed for other government agencies, etc.) by checking Block 4 of the FSIS Form 6200-1 as follows:

(1) Check "Meat" or "Poultry" as applicable.

(2) Check "Voluntary Inspection" if the sample is for any one of the following services:

- a. Identification Service
- b. Certification Service
- c. Food Inspection Service
- d. Reindeer Inspection Service
- e. Certification of Technical Animal Fat
- f. Rabbits and Edible Products Thereof
- g. Certification of Products for Dogs, Cats, and other Carnivora
- h. Voluntary Poultry Inspection Service
- i. Requirements of Importing Countries
- j. Game Animals - Buffalo, Elk, Pigeons, Pheasants, etc.
- k. Catalog

(3) Check "other" if the sample is other than the above-mentioned services, and specify what federal program is chargeable.

(b) Federal-State Programs

Identify each sample submitted from plants operating under Federal-State Cooperative Program described in the Wholesome Meat Act, by showing "WMA" in Block 13 of the FSIS Form 6200-1. Normally, samples taken under this program are submitted by a state inspector.

(c) Litigation Samples

Litigation samples are collected in anticipation or as a result of lawsuits involving alleged violations of the FMIA and PPIA.

The inspector must:

1. Protect the identity and integrity of such samples at all times by personally transporting them to the laboratory, or by

* shipping them to the laboratory
* using registered or certified mail
* under seal.

* 2. Keep approximately a 1-pound
reserve sample under seal in case of
* loss or need for subsequent
confirmation.

3. Notify the laboratory of ship-
ping and the approximate time of the
sample arrival.

* (d) Samples Requested by Standards
* and Labeling Division (SLD)

* See Subpart 17-A regarding instruc-
* tions for product samples requested
* by SLD. These samples are mailed di-
* rectly to SLD in Washington, DC, and
* therefore, should not be submitted
* to Field Services Laboratories.

(e) Vegetable Oil, Animal Fat

To determine whether animal fats
have been added to product
identified as "vegetable oil," send
samples to:

* USDA-FSIS-Science
* Midwestern Laboratory
* Bldg. 105
* 4300 Goodfellow Blvd.
* St. Louis, MO 63120

When mono- or diglycerides are
used, also submit a $\frac{1}{4}$ pound sample of
the mono- and or diglycerides.

The inspector should record in
Block 13 on the FSIS Form 6200-1,
product formulation, code markings,
and the following statement: "For
animal fat determination."

23.7 RECORDS

Maintain sample records at each
plant. Such records should be as
shown in Charts 23.1 and 23.2.
Product name shall be that shown on
* the label. For product codes see
* Part 20, Exhibit H.

When a sample is submitted to the
laboratory, enter the sample number
for each product in appropriate
month column. When laboratory
results are received, cross through
the number on the chart representing
* that sample if the sample is in
* compliance. If the sample is in
* violation, circle the number.

Chart 23.1 - Meat and meat food products

	code	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
	1310 10							650 163 166 176	650 186				
	1460 10							650 167 164 178	650 191 195				
								650 149 164 178	650 194				
								650 151 152 168	650 196				
	1340 34							650 154	650 192				
								650 170 171 179	650 187 184 189				
	1340 31							650 156 160	650 182 186 190				
								650 159 162 171	650 183 188				
								650 169 172 174	650 184 188				
								650 157 158 178	650 181 187				
								650 160 161 170	650 191				

Chart 23.2 - Nonmeat and nonpoultry items

Product	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Butter dry milk Dairy Farm Gilroy Creamery							650 145 148	650 197				
Gelatin Grays Lake Co.							650 142	650 200				
Soap - hand Oakite No. 88							650 144	650 198				
Salt							650 143	650 201				
Seasoning, frank Griffith Kearnsmith Madison							650 141 146 138	650 199 202				
Seasoning, bologna Griffith Kearnsmith Madison							650 131 136 142	650 204				
Seasoning, pork sausage Griffith							650 139	650 203				
Seasoning, liver sausage Kearnsmith							650 140	650 205				

MICROBIOLOGY

Subpart 23-B

(Regs: M-311, 318; P-Subpart J, K)

23.10 MICROBIOLOGY LABORATORY

(a) Type of Service

MPI microbiology laboratories provide consultative and analytical services in fields of food microbiology, diagnostic microbiology, serology, and antibiotic residues.

(b) Consultative Service

The inspector may obtain consultative service on microbiological sampling problems by letter (or telephone if urgent) addressed to appropriate laboratory. This service helps the inspector to take proper samples to assure that analysis will produce meaningful data. Data obtained from analysis of improperly selected, packed, handled, or shipped samples are of little value.

Requests. Requests for consultative services shall be handled as follows:

1. Inspectors shall obtain prior clearance from circuit supervisor.
2. STS-SS shall inform Field Operations of requests which may be of interest to FO.

23.11 SAMPLING

(a) Programs

Sampling may be initiated either from the field or from supervisors in Washington, D.C. Inspectors who need microbiological data may, upon approval from circuit supervisor, submit samples for this purpose.

Sampling by field personnel may be requested by FO or STS-SS through RD. Before extensive sampling programs

begin, requesting staff should contact appropriate STS-SS staff to determine whether samples can be handled.

(b) Laboratory Workload

Before shipping more than 20 samples, consult with microbiologist in charge of appropriate laboratory so that the laboratory can plan its program to handle the material.

(c) Equipment

Sampling equipment needed for programs initiated by Washington Staffs will be provided, if necessary, by them.

Following is a list of expendable items that may be obtained from appropriate laboratory or by direct purchase from manufacturer.

(1) Bags. Sterile "Whirl-Pak" bags for collecting up to approximately 16 ounces of sample (tissue, powder, or liquid). Nasco, Inc., Fort Atkinson, Wisconsin 53538.

"Zip Lip Bags" are heavy gauge and are suitable for meat samples that cannot be placed in the Whirl-Pak bags (turkey rolls, beef rolls, etc.). GSA Catalogue No. 8105-837-7757.

(2) Forceps. Sterile, disposable, plastic forceps. Catalogue No. 32800, American Hospital Supply, Evanston, Illinois 60201.

(3) Gloves. Sterile, disposable, plastic gloves for transferring samples from production lines to sample containers. Catalogue No. G 7233, Scientific Products. Distribution centers in most major cities.

(4) Swabs. Sterile swabs for diagnostic and other specialized sampling purposes. Catalogue No. 11747-006, American Hospital Supply, Evanston, Illinois 60201.

(5) Tongue depressors. Sterile tongue depressors for diagnostic microbiology and other specialized sampling purposes. Catalogue No. 11798-006, American Hospital Supply, Evanston, Illinois 60201.

(6) Centrifuge tubes. Sterile, disposable, plastic centrifuge tubes, (50 ml.) available from most local scientific supply companies. Catalogue No. 2070, Falcon Plastics, Division of Becton-Dickinson Laboratories, Inc., 1950 Williams Drive, Baxand, California 93030.

(7) Shipping containers. Insulated shipping containers are available from regional offices.

(8) Scissors. Sterile scissors set. Catalogue No. 32798-125, American Hospital Supply, Evanston, Illinois 60201.

(9) Scalpels. Sterile disposable scalpels. Catalogue No. 32390-022, American Hospital Supply, Evanston, Illinois 60201.

(d) Procedures

(1) Field sterilization. When sterilized instruments--knives, spoons, scissors, chisels, and other nonexpendable metal items--are not available, use one of the following sterilization methods after instruments are thoroughly washed:

1. Flame sampling end of tools with a propane torch, air cool and protect it from contamination before use. Caution: Excessive heating dulls knives and scissors.

2. Immerse sampling end of tool in sodium hypochlorite solution for 1-2 minutes. Shake excess solution from utensil and protect sampling end from contamination. The solution may be prepared by adding 2 ounces of commercial bleach to a gallon of potable water. Similar solutions are available in many plants.

Note: This is an effective, easily

performed procedure and uses equipment available in any plant. A bucket, sampling tools, household bleach, and hand washing facilities provide necessities for online sampling.

3. Immerse sampling end of cleaned tool in 180° F. water for 1 minute. Before use, protect sampling end from contamination.

(2) Size and number of samples.

Five to 10 ounces of product (150 to 300 grams or ml.) or consumer-size packages of final product are usually enough for a sample.

Sample size of blood, serum, urine, pus, exudate, spinal fluid, etc., is determined by individual conducting sampling or by consulting with the laboratory. Take samples representative of the product or significant to the suspected disease process. Samples from normal product or animal tissue should be taken and submitted as controls. Number of samples taken for analysis requires some degree of judgment. Significance of findings increases with number analyzed, but laboratory facilities are limited. Therefore, number of samples to be drawn will be designated by appropriate laboratory on all survey programs initiated by STS-SS. FO will designate number of samples to be drawn for control programs initiated by FO. For individual tests initiated in the field, the circuit supervisor will consult with FO.

(3) Product samples. Follow general aseptic procedures described under Sec. 23.11(d)(1).

(4) Online sampling. A plant employee, who ordinarily handles product at a particular point of a processing line, may take samples with his hands instead of using sterile implements. This is an acceptable technique since the worker touches the product anyway. Others must not touch product, container lip, or part of sterile implement that will contact product.

Place sample into a sterile Whirl-Pak bag, fold top of bag several times, close wire end over fold, and freeze sample without delay.

(5) **Diagnostic Samples.** To minimize contamination, take diagnostic microbiological specimens before the histopathological, and immediately freeze them.

(i) **Serum.** Serum submitted for serological diagnostic studies should be separated from the blood before freezing.

(ii) **Synovial fluid.** Submit intact joint and surrounding muscle in a poly bag.

(iii) **Tissues.** Tissue samples from suspected septicemic cases should be approximately 2 x 1 x 1 inches in size. Place each sample in a separate bag. Do not pool samples.

(iv) **Gross Lesions.** When gross lesions are numerous, submit excised whole lesions or groups thereof for both diagnostic microbiology and pathology. When only one lesion is found, excise entire lesions, cut in half, and submit as above.

(v) **Antibiotic residue; species identification.** Samples submitted for these purposes need not be taken aseptically, but they should be packed and shipped as described under "preparing and shipping." Freeze tissue samples without delay. Dry or shelf-stable samples may be shipped without refrigeration.

(6) **Unsatisfactory Samples.**

(i) **Thawed.** Perishable product samples for microbiological or antibiotic residue analysis will not be analyzed if received in a thawed condition and/or in broken bags. Since results would not necessarily reflect original condition of product, analysis

of such samples produces data of no value.

(ii) **Decomposed.** Tissue samples for serological analysis (species identification) will not be analyzed if received in a decomposed condition.

23.12 PACKAGING-SHIPPING SAMPLES

(a) Perishable Product Tissues

Proceed as follows:

1. Obtain a shipping container (Trans-Temp temperature controlled container) from regional office. Freeze temperature controllant canisters for 8-10 hours in a 0° F. to 10° F. freezer. Caution: Do not freeze below -10° F.

2. Sample should not be larger than available space. Freeze perishable materials immediately after sampling.

3. Place both controllant canisters in shipping container and bagged sample between canisters. The space should be completely filled. Use paper to fill space not used by product. If more space is needed, use another shipping container rather than trying to force too much into one.

4. Enclose applicable laboratory sample form in plastic bag.

5. Close and seal container according to printed directions on carton.

6. Affix MP Form 13 and mail immediately to appropriate microbiology laboratory. Use mailing address in the Meat and Poultry Inspection Directory for all microbiology samples. *

(b) Dry Product

Do not freeze dry product--milk, breeding mix, eggs, spices, etc. To ship, place unfrozen dry product in suitable, strong container and send to laboratory by regular mail.

1.1.1 Product

1.1.1.1 Pack all cans to prevent damage during shipping.

1.1.1.2 Stable. Submit several normal and abnormal cans except hard to chill abnormal cans in a cooler (not freezer) overnight. Chill abnormal can in a cooler, then in paper, and ship by suitable means. Send normal cans without refrigeration.

1.1.1.3 Perishable product. Contact nearest laboratory for shipping instructions.

2.13 PROCEDURE

2.13.1 All samples submitted for microbiological analysis, enclose appropriate laboratory sample form and full description of background information that answers (1) what prompted sampling, and (2) how, when, and where sample was obtained.

2.13.2 This information aids the microbiologist to select appropriate tests and to interpret results.

2.13.3 If product is retained pending analysis, so indicate to expedite analysis and reporting.

2.13.4 Suspected Disease. When diagnostic microbiological samples are submitted, record suspected disease and/or etiological agent on sample collection form.

PATHOLOGY

Subpart 23-C

(Regs: M-309, 311; P-Subpart J,K)

23.16 PATHOLOGY LABORATORY

(a) Diagnostic Assistance

Veterinary inspectors may obtain assistance in diagnosis of conditions noted in animals and/or carcasses during ante- and post-mortem inspection.

Processing inspectors may submit samples of comminuted products suspected of being adulterated with organ tissues or skin (hamburger adulterated with spleens, etc.).

The pathology laboratory also provides diagnostic assistance on problems involving parasites and vermin--rodents, insects--of public health significance.

Send specimens prepared in required pathology kits to:

Pathology Group, Scientific Services
Staff - MPI, APHIS, USDA
Building 318
Agricultural Research Center
Beltsville, Maryland 20705

(b) Specimen Collection

Submit tissues from all organs suspected of having lesions.

Portions of the more normal tissue adjacent to a disease lesion should be included with the lesion.

(1) Systemic condition. Opportunity for a pathologist to examine characteristic lesions produced by a disease in more than one organ contributes greatly to his ability to accurately diagnose the disease. For instance, a liver condition can best be understood and evaluated by studying the

effect on other organs--spleen, kidney, and heart. Therefore, when a neoplastic condition is suspected, take specimens from primary site (if detected), and from metastatic site.

(2) CNS disease. Diseases of the central nervous system may affect different areas of brain and spinal cord. When in doubt as to which sections of the central nervous system to submit, consult the pathology laboratory.

(3) Marek's disease. When Marek's disease is suspected, tissue specimens should include skin, sacro-sciatic nerve with attached dorsal root ganglion, gonad, liver, heart, spleen, kidney, muscle, brain, bursa of Fabricius, proventriculus, and adrenal gland.

(c) Specimen Preparation, Formalin

(1) Diseased tissues. Place all specimens of diseased tissues for microscopic examination in 10 percent buffered formalin as soon as possible. This assures proper fixation of tissues and minimizes post-mortem autolytic changes. The volume ratio of formalin to tissue should be 10 to 1 (never less than 5 to 1). Tissue specimens should not be thicker than 3/8 inch.

If a complete organ is submitted, incise at 1/4-inch intervals and place in adequate amount of formalin. Tissues should not be washed with water before formalin fixation.

Note: Do not freeze to prevent destruction of cellular characteristics.

(2) Adulterated product. When submitting samples of comminuted product to be examined for adulteration, chill a 1-pound block to a semifrozen condition. Then cut four random samplings, 1-1/2 X 1 X 3/8 inches, from the block and fix in formalin as above.

(d) Form MP 23

Each case must be accompanied by a completed Form MP 23. This form should identify (1) Specimen origin, (2) animal from which obtained, (3) carcass condition and (4) exact location, size, and appearance of lesions. A complete case history is needed if pathologists are to provide meaningful diagnostic assistance.

Retained carcass. When carcasses are retained pending receipt of laboratory report, and a telegram or a telephone call is requested at packer's expense, so indicate on Form MP 23 (see Part 20).

(e) Laboratory Cooperation

MPI veterinary inspectors with access to a microscope may request slide mounts of tissues they submit for histopathological examination. This service is available only for individual cases for which diagnostic service is required.

Slides of gross and microscopic pathology of certain animal diseases may be borrowed for study purposes by contacting the pathology laboratory.

TRANSPORTATION

TRANSPORTATION

Subpart 25-A

(Regs. M-325; P-Subpart S)

25.1 CERTIFICATION (MEAT)

Certification is not necessary for interstate shipment of marked "U.S. Inspected and Passed" product from a federally inspected plant in plant's vehicles or by individuals in their own vehicles.

25.2 NONFEDERALLY INSPECTED PRODUCT

Nonfederally inspected wholesome meat or poultry products, shipped from one point in a State to another point in the same State, may pass through another State without violating the FMIA or PPIA.

25.3 RECORD REVIEW

Compliance officers shall review records of interstate carriers to determine regulation compliance (M-325). Records of railroads, airlines, truck lines, railway express agencies, and post offices shall be included.

Inspectors shall review plant's shipping papers to determine whether they meet all requirements. Annual reviews shall be made. Findings shall be reported to CS.

25.4 UNMARKED, RESTRICTED PRODUCT

(a) Sealing

USDA seals shall be used to maintain identity of unmarked or restricted products. Breaking official seals without authority is prohibited.

(1) Vehicles. Before sealing, inspectors shall check for proper loading by examining bills of lading, loading schedules, and other available information, and determine that the first scheduled stop is at an official plant.

(2) Containers. Containers with restricted product shall be handled as required by 325.7 (MR).

(3) Notification. A completed MP Form 408, Request and Notice of Shipment of Sealed Meats/Poultry, shall accompany sealed shipments. Information listed on this form must fully describe the product it accompanies and identify the reason for sealing. The form should also include information that may assist the inspector receiving the product, i.e., pumping percentage pickups, partial or completed processes or treatments the product received, ingredient statements, lot numbers, etc. Whenever retain tags are required to go along with sealed product, inspectors shall record the tag numbers on the form.

A copy of MP Form 408 shall be securely attached inside sealed vehicles. On railway tank cars the copy shall be placed in a watertight protective envelope or bag and securely affixed to the tank with the official seal. Where possible, the envelope or bag containing the form should be

affixed under a tank's vent bonnet for protection. On tank trucks the form may be protected and secured similar to that for a tank car, or it may be placed in an envelope addressed to the destination inspector, sealed and sent along with the shipping papers carried by the driver of the sealed tank truck.

When an official seal is affixed to secure product, an MP Form 408-3, Warning Tag, shall accompany the seal.

(b) Seal Breaking

(1) **Safety.** To avoid injury, inspectors must break seals carefully. Plant employees may break Government seals under inspector's direct supervision only.

(2) **Diversion.** The origin establishment shall arrange for breaking seals when sealed vehicles are diverted en route.

25.5 NONARRIVAL OF SEALED PRODUCT

When a sealed shipment does not arrive in a reasonable time, the circuit supervisor shall notify the regional office by letter, giving information on kind of product, vehicle identification, origin establishment, and statement from the destination establishment concerning its knowledge of the transaction.

25.6 RETURN OF ALLEGED UNSOUND PRODUCT

Return of alleged unsound or misbranded federally inspected product between official plants shall be accomplished as follows:

a. The receiving inspector in charge shall relate all details of the shipment to his area supervisor. Whenever another area is involved, agreement between area supervisors must be reached for the return of each shipment. The receiving area supervisor will instruct his inspector if the shipment may be returned.

b. An inspector in charge instructed

to return a shipment shall complete MP Form 408, "Request and Notice of Shipment of Sealed Meat/Poultry." Comments concerning product condition or reason for return shall also be included on this form.

c. According to the usual circumstances involving each shipment, the inspector in charge should utilize the best means (official seal on vehicle, or cross tape and stamp units).

d. Area or circuit supervisor should make arrangements to have a supervisory inspector present to reinspect returned products.

Return of alleged unsound or misbranded federally inspected product from a nonofficial plant or location to an official plant shall be accomplished as required by regulations (325.10).

25.7 ANIMAL FOOD

(a) Canned Product

MPI is responsible for assuring whether canned animal product is denatured or labeled as required (MR-325.11). FDA is responsible for interstate shipment of such product and its freedom from adulteration.

(b) Lungs

Livestock lungs, prepared at official plants and complying with 310.16 and 325.8 (MR), need not be sealed nor accompanied by MP Form 508 to qualify for certified animal food program.

(c) Shipping Permit

Shipping permit numbers, required by 325.8 and 325.11 (MR), shall be requested by establishment's letter to RD. The permit will be issued by letter and will be the establishment number followed by a -1, -2, etc., depending on the number of permits issued in the State.

A warehouse is not required to secure a new permit number to reship undenatured lungs. Lungs from more than one permit holder may be shipped together to a pet food manufacturer. Origin plant's permit number and number of boxes covered by each permit shall be identified on shipping papers.

25.8 OTHER SOURCES OF REGULATIONS

The following manuals and bulletins contain Federal meat inspection regulations for interstate carriers:

Parcel Post--Parts 125.36 and 331.46 (subparagraph 461) of the Postal Manual.

Railway Express Agency, Inc.--General Circular No. 2-D of the Railway Express Agency.

Railroads--Freight Tariff No. 362-B and supplement issued by L. E. Kipp, Agent.

Trucks--American Trucking Assn., Inc., A.T.A. Bulletin Advisory Service, pp. 25-36.

Airlines--Official Air Cargo Tariff Circular A-1, Section 5, pp. 29-36.

PART 26

REIMBURSABLE SERVICES (MEAT)

(REFERENCE FSIS DIRECTIVE 5110.1,
5/18/84.)

NOTE! DUE TO CONDENSED MATERIAL, PAGES 276 and 277
WERE NO LONGER NECESSARY; THEREFORE, PAGE 278
FOLLOWS THIS PAGE.

IMPORTS

SPECIAL REQUIREMENTS

Subpart 27-A

(Regs: M-301, 316, 327; P-Subpart A, T)

27.1 DEFINITIONS

For purposes of this Part, the following definitions will apply.

(a) General

(1) Automated Import Information System (AIIS). A centralized, computer based, data processing system which maintains all available information relating to imported product and assigns inspection levels and procedures based upon established sampling rules and compliance history.

(2) Inspection Assignment.

Instructions generated by the AIIS detailing the type(s) of inspection to be performed (TOI), sampling status of the product lot(s) (tightened, normal, skip lot step 1, skip lot step 2) and, where applicable, random sampling data.

(3) Laboratory Sample. A product sample (for other than residue analysis) submitted for one or more of the following reasons:

- a. Previous non-compliance
 - b. Lack of product history
 - c. To confirm inspector's suspicions
 - d. Specific Program needs
 - e. Maintain product compliance history.
- Samples collected in categories a through d above may require that the lot be placed on "sample and hold."

(4) Sample and hold. Retention of product lots pending receipt of certain "laboratory sample" analytical results.

(5) Type of Inspection (TOI). A series of code letters appearing on the Inspection Assignment directing import inspection personnel to perform specific types of inspection and/or sampling, based upon type of product and compliance history.

(6) Code Marks. Markings which identify a lot or a distinct portion of a lot either by type of meat (hinds, fores, shanks, etc.) or a production run (day or period of day).

(7) Consignee. The person or party to whom the imported product is destined.

(8) Consignor. The person or party who sold the imported product to the consignee.

(9) Sampling Inspection. That type of inspection in which samples consisting of one or more units of production are selected at random from the completed lot and examined for one or more quality characteristics. Based upon this examination certain assumptions are made concerning the overall compliance for the lot.

(10) Sample. That portion of an imported lot used to estimate whether or not the lot is acceptable. Samples may at times be further sub-divided into sample units.

(11) Sample Units. A group of units forming a sample which are individually selected, identified and evaluated. A boneless meat reinspection, for example, may require a 72 pound sample consisting of six 12-pound sample units.

(12) Random Sample. A sample drawn in such a manner that every unit within the lot has an equal chance of being selected.

* * *

(13) Lot. A group of similarly processed/packaged product from one country, one establishment, and consisting entirely of one product code.

(14) Official Control. Inspectional restraint or direction without official security.

(15) Official Security. Inspectional restraint by use of an official device. (Seal, lock, crosstaped and stamped, etc.)

(16) Solid Mixed Product. Includes canned hams and picnics, slab bacon, or other solid single unit type products.

(17) Tempering. Removal of frost or ice glaze from surfaces of frozen meat cuts to facilitate product examination.

(b) Canning Definitions

(1) Buckle. A permanent distortion of the container end due to excessive internal pressures developing during heat processing

(2) Cable cut. An abrasion of the top of the container double seam caused by the action of moving cable conveyors on stationary cans.

(3) Determination. Separation of layers of packaging material that results in the questionable integrity and safety of the product.

(4) Flexible container. The shape or contour of the filled, sealed

container generally takes the shape of the enclosed product. The retort pouch is a common example.

(5) Flipper. A rigid metal container which normally appears flat, but when brought down sharply on the end of a flat surface, one end will flip out. When pressure is applied to this end, it will flip in again and the can will again appear flat (normal).

(6) Improper closure seal. Defects (e.g., entrapped food, grease, moisture, voids, fold-over wrinkles) in that area of the closure seal which extends 1/8 inch vertically from the edge of the seal on the food product side and along the full length of the seal.

(7) Improper tear notch. Less than 3/16 inch of defect-free seal from the end of the tear notch to the inner edge of the seal.

(8) Loose tin. End or ends of a rigid or semi-rigid container that do not show evidence of full vacuum, thus allowing movement.

(9) Overfill. Excess product in a container causing can ends to bulge. Usually identified by determining product net weight.

(10) Semi-rigid container. The shape or contour of the filled, sealed container is not affected by the enclosed product under normal atmospheric temperature and pressure, but can be deformed by normal firm finger pressure.

(11) Springer. A container (rigid or semi-rigid) with one end permanently bulged. When sufficient pressure is applied to this end, it will flip in, but the other end will flip out.

* 27.2 ELIGIBILITY

* (a) Countries

* To enter the United States, products must originate from approved countries (see Table 27.1), or be determined by the Administrator to be exempt from regulations.

* Table 27.1 - Country Codes

* Argentina	150
* Australia	160
* Austria	165
* Belgium	190
* Brazil	220
* Belize	230
* Bulgaria	245
* Canada	260
* Rep. of China	281
* Colombia	285
* Costa Rica	295
* Czechoslovakia	310
* Denmark	315
* Dominican Rep.	320
* El Salvador	330
* France	350
* Germany	390
* Guatemala	415
* Haiti	420
* Honduras	430
* Hong Kong	435
* Hungary	445
* Iceland	450
* Ireland	470
* Israel	475
* Italy	480
* Japan	490
* Mexico	595
* Netherlands	630
* New Zealand	660
* Nicaragua	665
* Norway	685
* Panama	710
* Paraguay	715
* Poland	730
* Romania	755
* Spain	830
* Sweden	850
* Switzerland	855
* Taiwan	860
* United Kingdom	925
* England-Wales	925E

N. Ireland	925I
Scotland	925S
Uruguay	930
Yugoslavia	970

(b) Plants

Only products from foreign plants approved (listed) by the meat and poultry inspection program are acceptable.

Product from foreign plants received after eligibility withdrawal (delisting) must be certified that it was produced before delisting date, or production dates listed on the certificate (see section 27.3(a)) must show the product was produced during a time of eligibility to export to the United States.

(c) PPQ Restrictions

(1) Inspector's responsibility. PPQ has certain restrictions on importation of products from specified countries. These restrictions have been entered into the AHS for proper control. However, inspectors must be aware of such restrictions (see 9 CFR Part 94, VS Memos 593.6, 593.7, 593.9, 593.15, etc.) and must not perform import inspection on any shipment unless all PPQ requirements are met. For questionable shipments contact the computer terminal operator for clarification.

(2) Poultry from France. The only poultry products which may be imported from France are those manufactured from ducks or geese. Such products may be received in combination with red meat or red meat byproducts.

(3) Certification. Ruminant and swine products from foot and mouth disease, hog cholera, African swine fever, and swine vesicular disease designated countries must be accompanied by required certification. Poultry and poultry products from viscerotropic velogenic Newcastle disease designated countries must also be accompanied by required certification.

* (4) Cooked Beef from South America. Each official tube of cooked boneless meat may contain pieces as small as 1/2 inch square provided the identity of the tissue is retained. No ground meat is permitted to be included in the tube. Each tube of cooked beef must contain the approximate center of the tube (the area farthest from all ends of the tube), at least one 1/2 inch piece of meat at least 1 1/2 inches in size. During import inspection this piece will be removed from the tube, cut in half, and compressed to determine for the presence of pink juices. If pink juices are detected, the entire lot is to be retained and notified through channels.

* (d) Other agencies

* MPI will not consider any shipment for import inspection until it has been cleared by PPQ, and U.S. Customs has officially assigned an entry identification number. Shipments identified with U.S. Customs "Warehouse Entry" numbers will not be given import inspection while in this category and the importer shall submit, without delay, a copy of the Customs warehouse entry form to MPI. MPI shall monitor all such warehouse entries.

* 27.3 CERTIFICATION

* (a) Regular Certificate

* To identify any product or shipment as having been certified by foreign officials before export to the United States, an official foreign meat inspection certificate from the country of origin must be presented with the request for inspection of all products other than those exempted by the Administrator. Such certificates shall be: (1) As required by regulations (M-327; P-Subpart T), (2) identified as the original and, (3) signed by an authorized official of the exporting country.

* (b) Erasures, Alterations

* A foreign meat inspection certificate is an official document of a foreign

government eligible to export to the United States. For continued U.S. acceptance of these certificates, and to maintain their integrity, foreign officials must exercise extreme care in their completion. The United States will not accept erasures or alterations on any certificate.

(c) Unacceptable Certificates

When certificates are incorrect or otherwise unacceptable, corrected certificates may be requested from the originating country's embassy by the importer. Inspection shall be withheld until a new certificate is received or the originating country embassy provides the regional office with a guarantee of certificate replacement. The embassy shall call the regional office through which the product is offered for import. Regional offices shall establish written procedures for maintaining records of all such transactions. The unacceptable certificate, together with the corrected certificate when received shall be maintained in the inspector's files along with all other documents and forms pertaining to the shipment.

(d) Additional Certification; Examples

Depending upon country of origin, type of product, method of preparation, or other special circumstances, certain shipments may require additional certification. Such certification should appear on the regular certificate (original).

(1) Pork. Product prepared to be eaten without cooking and containing pork muscle tissue must have trichinae certification as required by regulations (327.4(b)). Such certification is not required for canned product since it is heated to a temperature that destroys trichinae.

(2) Spring lamb. A statement is required for "New Zealand genuine spring lamb" carcasses and/or product indicating that they are from new crop

* lambs slaughtered in New Zealand from
 * October 23 through the following
 * May 31.

* (3) Shankless lambs Lambs without
 * attached foreshanks require a state-
 * ment indicating the product is from
 * ovine animals less than 1 year old,
 * and foreshanks are broken at the
 * distal epiphyseal cartilage of
 * metacarpal bone.

* (e) Lot Division; Certificate
 * Photostats

* Occasionally, product covered by one
 * certificate may be divided into several
 * lots, and scheduled to be unloaded at
 * various ports or shipped to different
 * destinations for inspection. In such
 * cases, import inspection supervisor
 * receiving the original certificate will
 * (1) require the importer or his
 * representative to furnish enough
 * photostats to cover each portion
 * shipped to different locations; and
 * (2) authenticate each copy by dating,
 * signing, including individual
 * destination circuit, and indicating
 * amount of product being shipped.

* When a certified lot or shipment
 * contains more or less than the amount
 * noted on the certificate, the inspec-
 * tor will refer to Table 27.2. If the
 * variation does not exceed the allowance,
 * it may remain in the lot. If it
 * exceeds the allowance, the entire lot
 * shall be ineligible for import inspec-
 * tion until proper foreign certification
 * is produced as outlined in Part 27.3(c).

* Table 27.2 - Allowed Variation

Amount (Units)	
Certified	Allowed ±
50 - under	0
51 - 100	1
101 - 200	2
201 - 400	4
401 - 600	5
601 - 1,200	6
1,201 - 2,000	7
2,001 - 5,000	8
5,001 - 10,000	10
10,001 - over	15

If the foreign embassy will not
 guarantee and provide a new certificate
 for the entire lot, the entire lot shall
 be refused entry. In any of these above
 instances, the inspector will note the
 variation on all copies of the MP 410
 before returning the third copy to U.S.
 Customs. If the product is refused
 entry, follow refused entry procedures

27.4 APPLICATION: MP 410

(a) Port of Entry (POE)

Importers shall prepare MP Form 410
 and present it to MPI personnel at
 POE.

(b) Destination inspection

Whenever products arrive at a U.S.
 port or point of entry where MPI per-
 sonnel are not assigned, importers may
 submit the MP Form 410 to U.S. Customs
 officials who will institute procedures
 for shipping product to destination
 locations where inspection facilities
 and personnel are available. Shipment
 to any destination shall not be made
 without prior assurance that inspection
 facilities and personnel are adequate
 for inspection. Regional offices will
 inform local Customs officials of the
 location of approved facilities and
 type of inspection, i.e., canned
 products, boneless meat, etc., for
 which the facility is approved.

(c) Consignee

For importation of meat from horses,
 mules, or other equines, the name and
 address of the ultimate consignee must
 appear on the MP Form 410. Brokers,
 intermediate agents, warehouses, etc.,
 are not usually considered ultimate
 consignees.

(d) Accurate Information

The inspector and/or computer ter-
 minal operator shall review the MP
 Form 410 for accuracy and return to
 the applicant any application con-
 taining incorrect or unsatisfactory
 information. If a corrected MP 410
 is required, it shall be conspicuously
 marked "Corrected Copy, Replaces
 MP Form number _____" (enter serial

* number of original MP 410) across the
 * top. The original MP Form 410 shall be
 * returned with the corrected copy.

* (e) Inspection Location

* If import inspection cannot be done
 * within a circuit for lack of facilities
 * or inspection personnel, applicants
 * will be advised where product may be
 * presented for most expeditious
 * inspection. Inspection will not be
 * performed on any lot not accompanied by
 * MP Form 410. Once an Inspection
 * Assignment has been issued, there will
 * be no changes in the inspection
 * location without authorization from
 * the Director of the region in which
 * the Inspection Assignment was first
 * issued. Regional offices will
 * immediately notify Foreign Programs
 * Division of any authorized changes in
 * inspection location.

* 27.5 FACILITIES, EQUIPMENT

* (a) Approval

* The necessary drawings with required
 * specifications shall be approved by the
 * Administrator and the facility shall be
 * constructed in accordance with the blue
 * print. The applicant agrees to conform
 * strictly to applicable Federal laws and
 * regulations pertaining to import
 * inspection and is responsible to ensure
 * compliance. The facility must be in
 * good repair, safe, efficient for proper
 * inspection and capable of being
 * maintained in a sanitary manner. If it
 * becomes necessary to program a
 * deficiency for correction, it may be
 * recorded on the regional plant
 * maintenance form.

* (b) Equipment

* Owners or operators of establishments
 * at which import inspection is conducted
 * shall furnish adequate equipment for
 * product examination. This will include
 * items such as band saws, inedible
 * containers, scales, knives, ink pads,
 * tape, weights of known accuracy to
 * check scales, pans, thermometers,
 * strainers, grinders, can openers and
 * similar equipment. Management shall
 * ensure all equipment such as

thermometers and scales are functional *
 and accurate. *

All equipment other than that *
 identified as exempt in the MPI-2 *
 "Accepted Meat and Poultry Equipment" *
 booklet shall be approved by the *
 Equipment Group prior to use at the *
 facility. Tables, benches and other *
 equipment on which inspection is to be *
 performed shall be of such design, *
 material and construction as to enable *
 Program employees to conduct their *
 inspection in an efficient and sani- *
 tary manner. *

(c) Security *

Security boxes, cages, rooms and *
 incubation facilities shall be designed *
 and constructed to provide necessary *
 security by means of official locks or *
 seals. Inspectors will check to assure *
 that security has not been breached. *

Supervisors will conduct unannounced *
 reviews of sample security and facility *
 activity and arrange approved sample *
 inventory procedures where applicable. *

(d) Lighting *

A minimum of 50 foot candles of *
 shadow-free lighting shall be provided *
 at all inspection locations. Adequate *
 lighting in other areas as approved by *
 the circuit supervisor. *

(e) Denaturing Procedures *

An approved denaturant will be supp- *
 lied by the applicant and be available *
 at the facility during operations. *
 Articles in pieces more than 4 inches *
 in diameter shall be freely slashed or *
 sectioned before the denaturant is *
 applied. Articles in cans, jars, or *
 otherwise packaged shall be removed *
 from the packaging material prior to *
 denaturing. Inspection personnel shall *
 be assured the products are stored in *
 properly marked containers and *
 effectively denatured before leaving *
 the inspection facility. Effective *
 control procedures shall be implemented *
 and approved by the circuit supervisor. *

(f) Packaging Material *

Poly bags, plastic bags, and similar *
 packaging material used to enclose *

product for water defrost shall be of sufficient strength to prevent leakage and/or breakage. A letter shall be provided by the supplier indicating material acceptance for edible product contact. A copy of the acceptance letters shall be on file in the government office.

(g) Storage and Staging Areas

These areas shall be maintained in a sanitary and safe condition. Improperly maintained equipment, such as fork lifts leaking operational fluids which may contaminate product or containers, shall not be used in handling meat and poultry products.

(h) Incubation - Shelf Stable Heat Processed Products

Follow procedures outlined in section 27.15(c). The heat sensing element for the temperature recording chart shall be lower than the lowest shelf storing product for incubation. A means of air circulation should be provided to assure uniform temperature distribution.

(i) References

There are many applicable requirements relative to imports recorded in various sections of the Manual. The following requirements are not all inclusive but are referenced to assist inspectors in assuring compliance with applicable provisions:

1. Water Supply - Subpart 8-D
2. General Sanitation - Subpart 8-B
3. Personal Hygiene - Subpart 8-C
4. Sanitation of Facilities and Equipment - Subpart 8-E
5. Chemical Compounds - Subpart 8-F
6. Insect and Rodent Control - Subpart 8-G
7. Special Sanitation Requirements - Subpart 8-H

27.6 MARKING, LABELING

(a) Approval

* The inspector shall approve the
* following labels in accordance with
* Section §324.14 and §327.15 of the

regulations at each location where the products are presented for import inspection.

(1) Labels for shipping containers which contain fully labeled immediate containers;

(2) Labels for single ingredient products in large size immediate containers not generally used for retail sale. For example, bulk-packed boneless meats.

(i) Required Information.

1. Outside containers (which is also the shipping container). The outside container in which any immediate container of foreign product is shipped to the United States shall bear, in English, in a prominent and legible manner the following:

a. The name of or descriptive designation of the product in accordance with §317.2 of the regulations;

b. The name of the country of origin;

c. The establishment number assigned by the foreign meat inspection system and certified to the Program;

d. Special handling statement such as "keep frozen" or "keep refrigerated", where necessary.

2. Immediate Container (when it is shipping container also): Labels for immediate containers such as tierces, barrels, drums, boxes, crates and large size fiberboard containers shall bear, in English, in a prominent and legible manner;

a. name or descriptive designation or the product in accordance with Part 317.2 of the regulations;

b. name of the country of origin preceded by "Product of" under the product name;

c. net weight;

d. special handling statement such as "keep frozen" or "keep refrigerated", where necessary;

e. name and address of either the foreign establishment, distributor, or importer; and

... shipment number assigned
... foreign meat inspection
... and certified to the

... File. Shipping container
... approval will be completed on
... as it is offered for inspec-
... it is not necessary to main-
... file of inspector-approved
... container labels. Circuit
... will ensure that inspec-
... properly reviewing and
... these labels, by periodi-
... inspecting and passed
... verifying that the labels
... to the requirements in item

(v) Label Location on Shipping

Containers The labels must be
at the end of the shipping
so that information is
visible when product is
for inspection. However,
with duplicate information can
on other parts of the
Required information
printed, stenciled or affixed
the shipping container by a
destructuring printed label.

The actual weight of the product
be legibly written on the
shipping container in ink, but the
words "net weight", "pounds (lbs)"
and "ounces (oz)" must be printed,
stenciled or labeled.

(1.) Lot Identification Marks. An
identification mark must appear on
the same main panel as the label on
all shipping containers comprising
lot of product and on the
certificate for that lot.
This identification mark shall be
used to distinguish each lot of
product and to relate product to the
certificate. The shipping mark may
be used for this purpose.

(v) Information Necessary for Import Inspection

The following information must be
displayed for the inspector on every
shipping container, (or immediate
container when it is also the
shipping container) presented for
import inspection:

- (1) Name of Product
- (2) Country of Origin
- (3) Foreign Establishment Number
- (4) Lot Identification Marks

Containers must be stacked on
pallets in such a manner that the
above information is readily visible
on all containers. In addition,
there must be sufficient space on
the part of the container displayed
to stamp the mark of import
inspection.

(2) Immediate Container Labels.

Labels for immediate containers,
capable of retail sale intact,
including artificial casings, bags, or
printed wrappers, must be approved by
the Meat and Poultry Standards and
Labeling Division. The foreign
establishment (or importing firm)
shall submit a sufficient number of
completed copies of MP Form 8822-1,
with the label attached to: Meat
and Poultry Standards and Labeling
Division, MPI Technical Services,
FSIS, 12th and C Street, S.W.,
Agricultural Annex Building,
Washington, DC 20250. The number of
copies submitted must equal the
number of ports of entry where the
product will be entered, plus one
copy for Foreign Programs Division
and any additional copies needed for
foreign country.

(b) Product Designation

(1) Product. The product
destination on the shipping
container must be the same as it
appears on the label approval form
(MP 8822-1) for the immediate
container or from standard U.S.
nomenclature; e.g., Uniform Meat

* Identity Standards, American Meat
 * Institute; Uniform Retail Meat Identity
 * Standards, National Livestock and Meat
 * Board, Meat Buyers Guide, National
 * Association of Meat Purveyors. All
 * words must be completely spelled out.

* (2) Cuts. Individual cuts may be
 * identified on the shipping containers
 * by their specific accepted name such
 * as "beef inside rounds", "beef
 * knuckles", "hams", "pork spareribs",
 * "pork shoulder picnics", etc.

* Pork-cut names usually used to
 * identify cured product must be used
 * with the word "fresh" when not cured;
 * e.g., "fresh hams." Product designa-
 * tions such as "bull", "cow", "baby",
 * "fatless", "frozen", "forequarter
 * meat", etc., are not permitted.
 * Examples of permitted designations are:
 * "boneless beef", "boneless beef
 * knuckles", "boneless fresh hams
 * partially defatted".

* (3) Other Required Designations.

* (i) Cheek meat must follow the
 * proper designation such as "boneless
 * beef-cheek meat" since it is a
 * restricted ingredient in certain
 * products.

* (ii) Rindless pork jowls must be
 * completely sliced or deeply scored
 * from the "meat" surface downward in
 * sections approximately 1 inch apart,
 * and cut surfaces must be observed for
 * abnormalities. This procedure must
 * be done in the originating foreign
 * establishment.

* (c) Industry Marks. Industry marks
 * on product containers for
 * distinguishing various trade
 * categories of meat and poultry
 * products are permissible but shall
 * not have labeling connotations.
 * These marks shall not be contiguous
 * to the product designation.

* (d) Country of Origin Marking.

* (1) Product Categories. The products
 * listed below must be marked with the
 * name of the country of origin preceded
 * by the words "product of" and the

foreign establishment numbers. If the
 mark of inspection of the foreign
 country contains the country name and
 the establishment number, that mark is
 sufficient to satisfy the
 requirement.

(i) Primal parts as defined in
 Section 316.9 of the regulations.

(ii) Individually wrapped cuts.

(iii) Bulk-packed cuts that are
 either fresh or individually frozen
 and packed in such a manner as to make
 them separable without defrosting the
 entire container. EXCEPTIONS:
 Steaks, pork ribs, neck bones.

(2) MP Form 408. The product
 identified under (d)(1) will not be
 required to be marked if it moves
 from import inspection directly to
 the official establishment that will
 further process the product. Move-
 ment of the product will be under
 modified MP Form 408.

(e) Carcasses (Meat)

When imported carcasses are separ-
 ated into various cuts normally having
 an inspection legend, the cuts shall
 be legibly marked to show the country
 of origin adjacent to such legend.

(f) Repackaged Product

When authorized by MPI, imported
 product may be repackaged under
 Identification Service. The origin
 country's name must be marked on each
 new package.

Imported product that is further
 processed by cooking, grinding, or
 slicing may be packaged under approved
 (domestic) label without reference to
 country of origin. However, if product
 is identified as "imported," the label
 must also bear a statement such as
 "sliced and packed in U.S.A."

(g) Horsemeat

Horsemeat is required to be marked
 "horsemeat" with green ink on larger
 pieces within every carton. At least
 one such mark is required on each 10
 pounds of bulk packed boneless meat.

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... markings or labels must be stamped, embossed, or lithographed on containers. Attached paper labels are not satisfactory.

(ii) Grade Marks
Imported products bearing grade marks similar to those used by Meat Inspection Branch, Livestock Division, shall not be accepted until such marks are checked and the quality of the product is verified by a Meat Inspection Branch representative.

(iii) Label File
All label approvals must be on file at the inspector's office for all products imported for inspection.

(iv) Metric Weight
Section 17.10(g)

27.7 MPI COOPERATION

Inspectors shall fully cooperate with U.S. Customs and other governmental agencies in handling imported products.

27.10 LOT PRESENTATION; CONDITION AND ACCURACY

Inspectors will initially check all lots in their entirety for general condition, proper labeling, and accuracy of count as specified on the MP Form 410 and health certificate. Lots, or portions of lots, demonstrating unacceptable conditions at this point shall be refused entry.

Damaged containers sorted out of a lot shall be examined by the inspector to determine cause and rejected and identified as such on the MP Form 410.

When the sorted product consists of abnormal (i.e., swells, flippers, springers) hermetically sealed containers and the abnormalities are not the direct result of shipping

INSPECTION PROCEDURES

Subpart 27-B

Imports M-316, 317, 327 P Subpart N, T)

Import inspections are required to determine whether imported product, certified by officials of approved countries, continues to be wholesome and meets U.S. requirements when offered for inspection. Importers shall provide competent personnel necessary for the efficient and effective application of required examinations.

damage, they shall be handled as outlined in section 27.15(b). The lot from which they were sorted shall be placed on "sample and hold."

Inspectors shall notify U.S. Customs of the sorted product and inform the field compliance office of its location.

27.11 LOTTING; LOT SIZE

Importers will designate on the MP Form 410 how they will present products (lot size) for inspection.

The weight and/or number of containers of similar product from one establishment is the "lot size" which is entered into the computer system to request an Inspection Assignment.

Importers should be encouraged to present the largest possible lots for inspection.

Non-separately identifiable lots presented for inspection shall be combined into a single lot by the inspector.

27.12 SAMPLING; PLANS; SELECTION

Inspections are performed using a variety of statistically sound sampling plans assigned by the Automated Import Information System (AIIS) according to type of product, type of inspection, and lot size.

* Such assignment should be obtained
* from the computer just prior to the
* time of inspection. The purpose of
* this procedure is to assure that the
* assignment reflects the most current
* inspection findings. However, we
* recognize that importers and FSIS
* import inspectors need time to
* manage and plan their schedules
* efficiently. Therefore, it is
* permissible to pull an assignment up
* to 72 hours prior to inspection.
* The 72-hour limit shall start at
* 3:00 p.m. the day the assignment is
* obtained from AIIS. AIIS assignments
* shall be carried out as stated except
* under the following situation:

1. The lot on initial visual examination is obviously unacceptable.

2. Inspection personnel suspect the authenticity, wholesomeness or integrity of the product. These suspicious lots should be discussed with circuit supervisors.

3. Product from the establishment has been rejected during the last 72 hours at that port. In such situations subsequent lots shall receive normal inspection.

If the inspection is not performed prior to the end of the 72 hour period and another assignment must be obtained, the most restrictive combination of the two assignments should be used.

Sample sizes determined by the computer system are further identified as randomly selected sample container numbers on the Inspection Assignment.

When the Inspection Assignment requires a two-step sampling plan as in boneless meat reinspection first step samples will be stamped once with the "USDA Official Sample" stamp, and second step samples will be identified by stamping twice with this stamp. Both first and second step samples will be removed from lots, kept separate, and be available for inspection as needed.

Wherever the Inspection Assignment sample container numbers cannot be used, or are not available, the inspector shall select random numbers from other acceptable sources. The selected numbers, reason for use, and their source shall be identified on the "Inspection Worksheet," MP Form 68.

Prior to sampling, the inspector shall determine that the lot is presented in a manner to provide for a meaningful count that will assure accuracy in selection of sample cartons.

selection of sample
obviously defective,
or otherwise suspicious
shall not be excluded from
sample, or passed over.

containers shall be maintained
under the control of the inspector, and
such control is not possible,
shall be adequately secured.

17.13 PRODUCT EXAMINATIONS;

SAMPLE PREPARATION

During sample preparation and product
examinations, inspectors must assure
that samples are handled in a manner to
maintain their wholesomeness and
integrity, as follows:

When inspectors observe question-
able defects, detect unusual condi-
tions, or suspect abnormal situations,
they shall immediately contact super-
vision for guidance.

Inspectors must assure that
samples are under their control or
adequately secured during preparation
for product examination.

c. Inspectors shall use the sampling plans and defect criteria listed on the reverse side of MP Form 68 for:

1. Boneless manufacturing meats
2. Condition of container examination (metal, glass, flexible, or semi-rigid)

3. Canned or packaged product examination (solid mixed product)

Defect descriptions and classifications for these examinations are on the front of MP Form 68.

d. Inspectors shall use the sampling plans and defect criteria in:

1. Table 27.3 for red meat carcasses, sides, and quarters.

2. Table 27.4 for red meat wholesale cuts (insides, knuckles, hams, loins, etc.). For lamb, mutton, pork, and goat carcasses use Table 27.4 and proceed as follows: Select sample carcasses using random numbers contained in the inspection assignment. The 12-pound sample unit will be an

estimated weight from either the fore, rack, loin, or hind section. The first 12-pound sample unit (section of carcass) will be randomly selected from either the fore, rack, loin or hind section. The second and additional sample units will continue in a rotation pattern. For example, if the starting point selected is the loin section, the sample unit from the next carcass would be a 12-pound sample unit from the hind section, the next sample unit would be from the fore section, etc.

3. Table 27.5 for red meat retail cuts (steaks, chops, roasts, etc.).

4. Table 27.6 for poultry carcasses (chickens, turkeys, etc.)

e. For products not previously or specifically described (i.e., pork feet, extracts of meat, etc.), inspectors shall examine them using acceptance criteria as required by regulations, procedures, or policies for domestic product:

TABLE 27.3

SAMPLING PLANS FOR RED MEAT SIDES(*)

LOT SIZE (IN SIDES)	STEP	SAMPLE SIZE (SIDES)	CRITICAL		MAJOR		TOTAL	
			ACC	REJ	ACC	REJ	ACC	REJ
100	-	3	1	2	4	5	12	13
250	1	4	1	3	3	7	12	17
	2	3	-	-	-	-	-	-
		7	2	3	8	9	24	25
500	1	7	1	5	4	10	18	28
	2	7	-	-	-	-	-	-
		14	4	5	14	15	45	46
500	1	10	1	6	6	13	18	37
	2	12	-	-	-	-	-	-
TOTAL		22	6	7	21	22	68	69

(*) USE CARCASS AQL PROCEDURES (DEFECT DESCRIPTIONS/CLASSIFICATIONS)
IN MPI MANUAL, PART II

TABLE 27.4
SAMPLING PLANS FOR RED MEAT WHOLESALE CUTS(*)

LOT SIZE (IN POUNDS)	SAMPLE SIZE (12 LB) (UNIT/AREA)	CRITICAL		MAJOR		TOTAL	
		ACC	REJ	ACC	REJ	ACC	REJ
24,000	12	0	1	1	2	5	6
60,000	30	0	1	2	3	10	11
140,000	47	0	1	3	4	15	16
300,000	67	0	1	4	5	20	21
1,000,000	89	1	2	5	6	25	26
999,999	120	1	2	6	7	32	33

(*) USE BONELESS MANUFACTURING MEAT PROCEDURES (DEFECT DESCRIPTIONS/CLASSIFICATIONS)

TABLE 27.5
SAMPLING PLANS FOR RED MEAT RETAIL CUTS (*)

LOT SIZE (IN POUNDS)	SAMPLE SIZE (12 LB)	CRITICAL		MAJOR		TOTAL	
		ACC	REJ	ACC	REJ	ACC	REJ
24,000	12	0	1	0	1	1	2
60,000	30	0	1	0	1	3	4
140,000	47	0	1	0	1	4	5
300,000	67	0	1	0	1	5	6
1,000,000	89	0	1	1	2	6	7
999,999	120	0	1	1	2	8	9

(*) USE BONELESS MANUFACTURING MEAT DEFECT DESCRIPTIONS/CLASSIFICATIONS

TABLE 27.6
SAMPLING PLAN FOR POULTRY CARCASSES (*)

LOT SIZE (IN POUNDS)	SAMPLE SIZE (CARCASSES)	MAJOR		TOTAL	
		ACC	REJ	ACC	REJ
99,999,999	20	7	8	42	43

(*) USE CARCASS AQL PROCEDURES (DEFECT DESCRIPTIONS/CLASSIFICATIONS) IN MPI DIRECTIVE 918.1

27.14 PRODUCT SAMPLING**(a) Sample Size, MP Form 68**

MP Form 68 will be used to determine the required sample sizes and to report all examinations.

(b) Canned Product**(1) Sample Selection**

Enough shipping cartons must be randomly selected to obtain the required number of containers for the sample. Containers will be randomly selected from the sample cartons using Table 27.7.

TABLE 27.7 - SAMPLE SELECTION

Containers in carton	Sample
5 or less	All
6 - 12	6
13 - 60	12
61 - 230	16
231 or more	24

If, by using Table 27.7, the number of shipping cartons in a lot is not sufficient for a full sample, the inspector will select more samples from each carton. If the total number of containers in a lot is equal to or less than the required sample, the inspector will examine the entire lot.

(c) Combo Bins Containing Canned Hams and Picnics

Combo bins containing cans in excess of 10 lbs. net weight will be sampled according to the random numbers provided by AIIS based on the total can count in the lot. For example, if a lot of product consisted of 20 combo bins containing 80 cans per combo, then combo bin number 1 would contain cans 1 - 80, combo bin number 2 would contain cans 81 - 160, etc.

(e) Combo Bins Containing Fresh Hams, Bellies, Boneless Manufacturing Meats, Etc.

Combo bins containing fresh meats such as hams and bellies will be treated as containing 18 sample selection sites. The 18 sites in the combo bin are indicated in Figure 27.7-A (see page 289a). Where there is more than one bin in a lot, selection sites for all bin will be numbered consecutively. For example, combo bin number 1 would contain sites 1-18 and combo bin number 2 would contain sites 19-36, etc. Sample units will be selected according to the random numbers provided by AIIS based on the total sites in the lot.

The establishment's employees will expose the sample selection sites. If only one possible sample unit can be taken from a sample selection site, the inspector will select that sample unit. However, if more than one sample unit could be taken, the inspector will use an approved random selection method to determine the sample unit to be taken.

If more than one sample is to be taken from a combo bin, the inspector will first collect the upper level sample units located in sample selection sites 13, 14, 15, 16, 17, and 18, and label them appropriately. Then the inspector will collect and label the sample units from the middle layer containing selection sites 7, 8, 9, 10, 11, and 12. Finally, the inspector will collect and label the units from the bottom layer containing selection sites 1, 2, 3, 4, 5, and 6.

For sampling plans containing two steps, as in the case of boneless meat reinspection, the inspector will draw all sample units from a combo bin without regard as to whether it is first or second step sampling. The sample units will then be adequately coded as first or second step sample units

Part 27

COMBO DIVIDED INTO SITES FOR
SAMPLE SELECTION OF FRESH MEATS

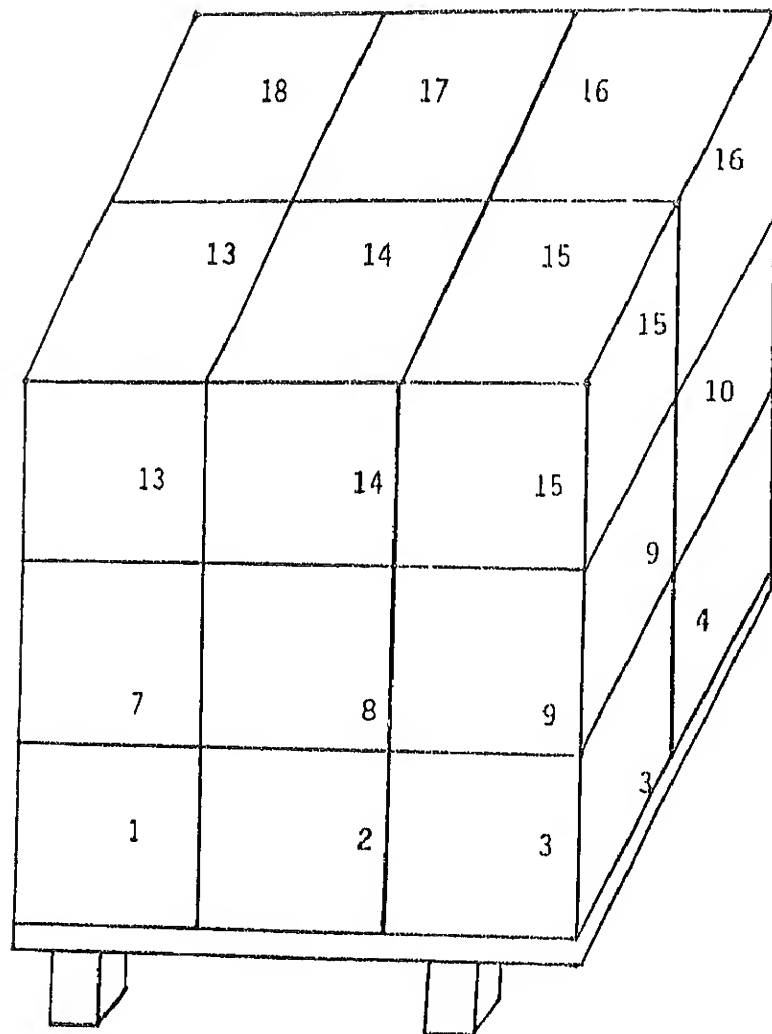


Figure 27.7-A

There are four sites not visibly illustrated. Directly under Site 17 are Sites 5 (bottom layer) and 11 (middle layer), and directly under Site 18 are Sites 6 (bottom layer) and 12 (middle layer).

27.15 LOT EXAMINATION**(a) Inspector Responsibility**

If questionable defects are identified during lot examination, the inspector shall contact his or her immediate supervisor for guidance.

For shelf stable products packaged in flexible or semi-rigid containers, foreign establishments must have prior approval of their processing and production procedures. Therefore, the inspector, through his or her immediate supervisor, shall determine from Foreign Programs Division that the establishment has complied with requirements before initiating inspection of the product.

b) Shelf Stable, Heat-Processed Product

Applies to meat and poultry products that are packed in hermetically sealed (airtight) containers and are intended to remain safe and stable at room temperature.

Condition-of-Container Examination. The inspector shall visually examine each container drawn for the sample using the defect criteria on IP Form 68.

The finding of a container exhibiting any one of the following conditions requires that the lot be retained and the procedures outlined in Part 27.16(e) be followed:

- | | |
|--------------|-------------|
| 1. Swell | 5. Overfill |
| 2. Flipper | 6. Leaking |
| 3. Springer | 7. Burst |
| 4. Loose Tin | |

Only sound, normal-appearing containers shall be returned to an accepted lot.

(c) Container Examination Procedures

(1) Metal containers. If the can has a paper label, examine the label for stains that may be evidence of leakage, rust, etc. Put slight pressure on one end and observe for any movement of either end. Repeat the procedure for the other end. Gently run a finger

along all double seams to detect any defects. Visually examine the double seam(s), the side seam and any container score lines on easy-open and pull-top devices for defects, leakage, etc. Check the container code impression to ensure there is no metal fracture or stress.

(2) Glass containers. Examine jar surfaces for obvious defects or crooked caps, etc. Examine the exterior of the jar closures for food particles or foreign material. Place slight pressure on the center of the cap and observe for any movement that may be indicative of a swell, flipper, short vacuum, loose cap, etc. If the cap has

a safety button or flip panel, such should also be checked to ensure proper sealing.

(3) **Flexible containers.** All flexible containers (pouches) must be packaged in an immediate overcarton. Remove each container from its overcarton and observe for possible vacuum loss, swelling delamination, and leakage. Inspect each side of the container for cuts, cracks, scratches, food material, punctures, missing labels, foreign material, etc. Check pouches for improper closure seals (defined in section 27.1).

(4) **Semi-rigid containers.** Such containers come in a variety of types and sizes and are generally either sealed as a conventional metal container (double seam) or more commonly by heat sealing. If the container has a double seam, the procedures in section 27.15(c)(1) should be followed. If the container is heat sealed, the seal area should be examined for entrapped matter, delamination, leakage, etc. The containers should be examined for punctures, cracks, etc. All semi-rigid containers, like flexible containers, must be packaged in an immediate overcarton.

1. If there are punctures, slits, cracks, or openings in the metal, score in Code 220 (Punctured Cans).

2. If seams are broken, cracked, fractured or malformed, with an indication that an opening in the seam exists, score in Code 224 (Improper Seams).

3. If product is leaking or if there is evidence of leakage, score in Code 227 (Other).

4. If any part of the container is crushed resulting in an opening in the container or crushed to the extent that a determination cannot be made as to whether or not there is an opening, score in Code 222 (Major Dent).

5. If there is deep pitted rust to the extent that the container is perforated; i.e., completely through the metal or nearly perforated, score in Code 223 (Rust).

6. Rust that can be wiped off the container and has only etched or slightly pitted the metal, do not score.

27.16 PRODUCT EXAMINATION; INCUBATION.

(a) Product Examination.

It shall be conducted in accordance with the sampling plan and defect criteria provided on MP Form 68. Examples of foreign matter found during product examination that are considered critical defects include glass fragments, metal, wire and stones. Other defects that should be noted include off-odor and color, abnormal product consistency, etc.

(b) Sample Incubation

Provided the lot has been found acceptable on the condition of container examination and product examination, samples shall be incubated for further assurance of container integrity and the product's shelf stability. The inspector shall place

* (5) **Metal containers for meat**
 * **extracts.** Reference MPI Regulation
 * Sections § 319.720 and § 319.721.
 * Meat extracts and fluid extracts of
 * meat are not heat-processed
 * (retorted) but are preserved by low
 * moisture and high salt levels. The
 * container protects the product from
 * direct contamination.
 * MP Form-68, Imported Meat and
 * Poultry Product Inspector Record,
 * will be used by the import inspector
 * to score the condition of the
 * container. The section of the
 * MP Form 68 marked "Condition of
 * Container" will be used and all
 * defects defined below will be scored
 * as MAJOR. The remaining code blocks
 * are NOT to be used.

the lot on hold and notify the regional office when abnormal containers develop during incubation.

1. Incubation samples shall consist of 24 units, randomly selected from the lot being examined.

2. Only sound, normal-appearing containers shall be selected for incubation.

(c) Incubation Procedures

1. Incubation of samples shall be consistent with current MPI regulations (§ 318.11(1)). For flexible and semi-rigid containers, a 20-day incubation period is required unless otherwise instructed by Foreign Programs Division.

2. If the incubator temperature drops below the minimum temperature specified in the MPI regulations, the temperature shall be readjusted and the incubation time extended for the time the samples were held at the lower temperature. Conversely, if the incubator temperature exceeds the maximum temperature specified in the regulations, the same procedure shall be followed. EXCEPTION! If the incubator temperature ever exceeds 103°F., the test shall be terminated, the samples removed, the incubator temperature returned to within the acceptance range, and new randomly selected samples incubated for the required number of days.

d) Lot Release Before Completion of incubation

All applicable inspection procedures, including incubation, must be accomplished before marks of inspection are applied and canned shelf stable product is determined to be acceptable and released.

e) Handling of Abnormal Containers

All abnormal containers found during the condition of container examination, and all containers that develop abnormalities during incubation shall be handled in the following manner by the inspector. (NOTE: Containers that develop apparent abnormalities during

incubation should be allowed to adjust to room temperature before a final evaluation is made regarding containers condition.)

(1) Reporting procedures. When any abnormal containers are found, the inspector shall immediately inform the circuit supervisor. The inspector or supervisor shall then immediately contact, by telephone, the Microbiologist-in-Charge at the designated Multidisciplinary Laboratory (i.e., Athens, St. Louis or San Francisco), and the Regional Office so that Foreign Programs Division may be alerted. The following information shall be reported:

1. Name of the inspector, location and telephone number;
2. Foreign establishment number and name;
3. Product name, container type and size, and container code;
4. Where abnormals were found (i.e., incubator, condition of container examination, warehouse), a description of the defect(s) and the approximate number of abnormals.
5. Size of lot(s) under retention and whether there is any evidence of additional abnormals; and,
6. Any other pertinent information.

The inspector shall subsequently inform the broker of the actions taken.

(2) Submission of samples. The Microbiologist-in-Charge will provide instructions regarding submission of samples (e.g., number of abnormal and normal containers, method of shipment, etc.). The inspector shall immediately ship the laboratory samples with the completed MP Form 6000-1. If for any reason samples cannot be shipped immediately, such should be placed under security and held under refrigeration (not frozen).

(3) Inspection of other lots. Subsequent lots of similar product from the same producer shall be inspected for any evidence of similar defects. If

similar defects are found the lot shall be placed on hold and the regional office and Microbiologist-in-Charge notified.

(4) Disposition of retained product. The Inspector will be informed, through supervisory channels, of the disposition of the product being held.

(f) Canned; Perishable

Perishable "Keep Under Refrigeration" Canned Product applies to all meat products that are packed in hermetically sealed containers (airtight) and are intended to be kept refrigerated at all times.

(1) Condition of Container

Examination. Such examination shall be consistent with the procedures provided for Shelf Stable, Heat-Processed Product (see section 27.15) and MP Form 68.

(2) Product Examination. Such examinations shall be consistent with the procedures provided for Shelf Stable Heat-Processed Product and MP Form 68. In addition, for solid-packed product such as canned hams and picnic, slab bacon, or other products primarily of a solid unit, the inspector shall observe all outer surfaces and make at least one cut through the product to check inner surfaces for defects, possible product discoloration indicative of underprocessing, etc. (Submission of samples to the laboratory for internal temperature is discussed in section 27.17(c)(2)).

(3) Sample incubation. Not applicable for perishable products

must perform the "pink juice" test to detect possible under cooking (see section 27.2(c)(4)).

(4) Handling of Abnormal Containers

The inspector shall follow the procedures provided for Shelf Stable, Heat-Processed Products.

(3) Frozen sample units shall be completely defrosted for examination. Inspectors must be assured that the entire contents of a carton are subject to sampling. Sample units may be selected from the center or either end of the meat block and shall not be less than 2 inches thick. Defrosting may be accomplished by use of hot water, hot air, or natural means. Defrost procedures must prevent product contamination.

(5) Disposition of Retained Product. The inspector will be informed through supervisory channels regarding the disposition of any retained product.

(g) Net Weight

Net weight checks of imported product will be conducted as directed on the Inspection Assignment. Results of tests will be recorded on the MP Form 68.

(4) When defrost is accomplished by immersion in liquid the establishment shall supply high quality plastic bags or other acceptable means of preventing defrost liquid from contacting and adulterating the sample unit. If contact with defrost media occurs, the affected sample unit shall be condemned, and a new sample drawn from the same container as the original. The temperature of the defrost media shall not exceed 125°F., and shall not affect the appearance of the sample.

(h) Vignette, Declared Count

During product examination of canned or packaged product, the inspector will also determine compliance of the label vignette and declared count, if applicable, following procedures described in sections 18.63 and 18.64 of the Manual.

(i) Boneless Meat

(1) Boneless manufacturing meats shall be examined by using sampling plans and defect criteria listed on MP Form 68. All examinations will be recorded on the form. Examination will also be performed on frozen, bulk-packed wholesale cuts, boneless goat, boneless mutton, edible horsemeat, and cooked meat. When sampling bulk-packed, boneless wholesale cuts, the inspector shall select 24-pound sample units. The MP Form 68 does not list all of the boneless pork defects which appear in section 18.13, Chart 18.1-A. When non-listed defects are observed they will be entered under "other" code 331, and explained in the remarks column.

(j) Sample Identification

Definite identification of sample units by respective lots will be maintained through all phases of sampling and inspection.

(2) When examining cooked meat from restricted countries, the inspector

Inspectors must be sure that samples are under their control, or under official lock or seal at all times after selection and until the lot has been inspected and passed, or inspected and refused entry. Sample cartons traveling from the port of entry or warehouse to a defrost facility must be under direct visual control of the inspector or travel under official seal. The inspector must use codes that identifies the lot to identify each sample, and correlate each sample with the corresponding box. A procedure for selecting, transporting, securing samples, defrosting and inspection must be developed by the

... approved by the circuit
... and kept on file at the
...

* (1) Defects

* ... product examination, defects
* ... lots shall be removed under
* ... observations. Defects
* ... lots must be placed into
* ... identified sample box and
* ... before the refused entry lot
* ... the United States. Defects
* ... from accepted lots will be
* ... and discarded when inspection
* ...

* (1) Wholesale Cuts

* ... individually wrapped or
* ... pieces by using sampling plans
* ... 27.4 Use defect type,
* ... and classification outlined
* ... 18.13, Charts 18.1 or
* ... as applicable. The inspector
* ... a unit of approximately
* ... from each sample carton
* ... cutting individual pieces.
* ... frozen cuts only after suffi-
* ... to remove frost or
* ... and to allow the meat surfaces to
* ... product compliance and
* ... product history.

LABORATORY SAMPLES

Subpart 27-C

(Pgs M-318, 327 P-Subpart O)

* Laboratory samples, together with
* product examination, are used to
* determine product compliance and
* establish product history.

* 27.17 SAMPLING

* (a) History

* Unless a compliance history has been
* established, individual product

shipments are placed on "sample and hold" pending receipt of laboratory analytical results. If the Inspection Assignment is not specific concerning compliance history, additional information may be obtained from the computer terminal operator.

With the concurrence of the circuit supervisor, inspectors may override the Inspection Assignment and apply "sample and hold" criteria at any time there is reason to suspect noncompliance.

(b) General Procedures

See Part 23 for preparation of samples for chemical, microbiological, and special analytical requests, and section 11.18(i) for preparation of samples for residue analyses.

Inspectors will follow sampling instructions contained in the Inspection Assignment. Samples must be selected in a manner to assure that they are representative of the lot offered for entry.

Where feasible, laboratory samples should be selected from containers opened for product examination.

To provide an accurate record of lots sampled, the product name, production codes and all other identifying marks must be noted on the sample forms.

Samples must be maintained under the inspectors direct visual control or official lock or seal until delivered to the postal department or other carrier for shipment to official or certified laboratories. It is no longer necessary to delay mailing of samples to FSIS laboratories to avoid weekend delivery. Arrangements have been made to assure that samples arriving by mail on Saturdays, Sundays, and holidays will be picked up by laboratory personnel.

If samples are shipped via carrier other than the postal department the receiving laboratory must be alerted to expect delivery.

(c) Specific Procedures

(1) Canned hams, loins, picnics, and similar pork products (Table 27.8).

a. Select samples as directed on the Inspection Assignment. Product

controlled by "normal or "skip lot" criteria need not be held pending laboratory results. However, if a Zone E result is received, retain the sampled lot if it is still on hand.

b. When the Inspection Assignment indicates that the lot is to be inspected and sampled under "tightened" criteria, submit approximately a 1-pound sample of a composite of 6 cans (submit 6 individual cans if a composite is not feasible). Hold the lot pending receipt of laboratory results and:

1. Release the lot if the average sample results are in Zone B or lower.

2. Refuse entry if the average sample results are in Zone B₁, or

higher.

c. Previously sampled lots refused entry because of sample results in Zone B₁, or higher may be further sampled, at the importer's request, by random selection of 30 additional single cans from the lot. Release the product if:

immediately notify the computer terminal operator. The results will be entered in the AIIS, and the establishment's product compliance history will be adjusted accordingly.

e. Additional laboratory analyses requested by the importer as described in paragraph (iii) above, will be performed by a certified laboratory at the importer's expense.

(2) Canned Perishable Pork Product.

a. When underprocessing of canned perishable pork products is suspected, submit samples for internal temperature determination. Place the suspect lot under retention until laboratory analysis is received.

b. When samples of product from VS restricted countries indicate underprocessing, inspectors shall immediately contact the PPQ officer in charge at the port of entry for

TABLE 27.8

CANNED PORK SAMPLE LIMITS

Zone	Hams, Loins Similar Pork Products	Picnics
A	108.0 or Less	108.0 or Less
B	108.1 - 110.4	108.1 - 109.5
B ₁	110.5 - 110.8	109.6 - 109.8
C	110.9 - 113.5	109.9 - 111.6
D	113.6 - 116.2	111.7 - 113.5
E	116.3 - Over	113.6 - Over

1. The average of the 30 samples does not exceed Zone A and;

2. None of the individual results are in Zone E.

d. Upon receipt of laboratory results for product sampled as described above, inspectors will

notification to VS. Inspectors will also notify the computer terminal operator.

(3) Moisture Protein Ratio (MPR).

Table 27.9 establishes decision zones for moisture protein ratios of certain imported products.

a. Select samples as directed on the Inspection Assignment. Product controlled by "skip lot" criteria need not be held pending laboratory results.

b. When the Inspection Assignment indicates the lot is to be inspected and sampled under tightened criteria, retain the lot pending receipt of laboratory results and:

1. Release the lot if the sample result is in Zone A or lower.

2. Refuse entry if the sample result is in Zones B or C.

c. Previously sampled lots refused entry because of laboratory results in Zone B may be further sampled, at the importer's request, by random selection of 6 additional samples from the lot. Release the product if:

1. The average of the 6 samples does not exceed Zone A and;

2. None of the individual results are in Zone C or higher.

d. Previously sampled lots refused entry because of results in Zone C may be further sampled, at the importer's request, by random selection of 30 additional samples from the lot. Release the product if:

1. The average of the 30 samples does not exceed Zone A and;

2. None of the individual results are in Zone C or higher.

e. Upon receipt of laboratory results for product sampled as described above, inspectors will immediately notify the computer terminal operator. The results will be entered into the AIIS, and the establishment's product compliance history will be adjusted accordingly.

f. Additional laboratory analyses requested by the importer as described above, will be performed by a certified laboratory at the importer's expense.

(4) Species Sampling. Species sampling will be automatically assigned by the AIIS. When the Inspection Assignment calls for a species sample, the inspector will:

1. Use MP Form 6000-1.

2. Note on the Form "Import Species Monitoring Program."

3. Select a 4 oz. piece of meat (100 grams) from any box assigned by AIIS random numbers for sample selection.

4. Send species samples to the Microbiological Laboratory assigned to the State as listed in the Meat and Poultry Inspection Directory.

5. Inform Foreign Programs Division of any problem encountered.

In addition to species sampling directed by the Inspection Assignment, inspectors will submit samples for analysis at any time they have reason to suspect product species. When this is done, follow procedures outlined above and retain the lot pending receipt of laboratory results. Note the following on the MP form 6000-1, "Inspector Initiated" - "Product Held" - "Region Notified."

(5) Canned Luncheon Meat

a. The Meat Inspection Regulations, Section 319.260 permits water or ice to be used in the preparation of luncheon meat in an amount not to exceed 3 percent of the total ingredients. The 3 percent is considered to be a lot average limitation. Although the standard is to be controlled at time of formulation, laboratory analyses can be used to verify effectiveness of the formulation controls. Sampling and inspection procedure are as follows:

b. A single unit sample will be drawn and tested from each lot selected for examination. To compensate for analytical variation, the lot will be passed if the sample unit does not exceed 4 percent added moisture. If the sample unit exceeds 5 percent added moisture, the lot will be rejected as containing an average above 3 percent added moisture or sample unit variation too great to allow accurate determination of the average added moisture.

c. If the sample unit exceeds 4 percent but not 5 percent added moisture, the importer may either (1) consent to rejection of the

* lot, or (2) request that the
* inspector draw an additional 30 unit
* sample to be analyzed at the
* importer's expense. The average of
* the analyses for this sample must be
* 3 percent or less added moisture and
* no single sample unit may exceed
* 5 percent added moisture.

(d) Receipt for Laboratory Samples

Inspectors will complete MP Form 64 whenever samples are collected for laboratory examination. Give the original to the importer and attach the duplicate to the original copy of the MP Form 410 which is forwarded to the computer terminal operator.

DISPOSITION

Subpart 27-D

(Regs: M-317; 327 P-Subpart L, T)

Disposition of imported product is based upon compliance with MPI and other governmental Agency requirements.

TABLE 27.9

MOISTURE PROTEIN RATIO

Product	Zone A	Zone B	Zone C
Beef/Mutton Corned Canned	2.28:1	2.29:1 - 2.34:1	2.35:1
Beef			
Dried (Chipped)	2.04:1	2.05:1 - 2.10:1	2.11:1
Jerky/Pemmican	0.75:1	0.76:1	0.77:1
Roast (Parboiled Steam Roasted Canned)	2.25:1	2.26:1 - 2.31:1	2.32:1
Sausage			
Air Dried	2.10:1	2.11:1 - 2.15:1	2.16:1
Dry Fermented (Except Genoa)	1.90:1	1.91:1 - 1.96:1	1.97:1
Genoa Salami	2.30:1	2.31:1 - 2.36:1	2.37:1
Canned Mortad- ella	3.85:1	3.86:1 - 4.04:1	4.05:1
Pepperoni	1.60:1	1.61:1 - 1.65:1	1.66:1
Meat Broth/ Stock			
Concentrated	67:1	N/A	N/A
Regular	135:1	N/A	N/A

* 27.18 NONINSPECTED PRODUCT

* Information relative to imported
* product not presented for inspection
* within 30 days shall be reported to the
* regional office.

considered complete when lots are on
hold pending receipt of sample results,
or are under active appeal! When a lot
or portion of a lot is refused entry,
the inspector will identify amounts,
rejection codes, and disposition.

* 27.19 MP FORM 410

* (a) Completion

* Section E of the MP Form 410 shall
* be completed, signed and dated by the
* inspector upon completion of the
* examination. Note: Inspection is not

* (b) Codes

Inspectors shall assure that correct
country, product, and where applicable,

rejection codes are entered on the MP Form 410.

(1) Country codes. See Table 27.1.

(2) Product codes. Use the code listed on the Inspection Assignment. If there is a question concerning the accuracy of a product code, contact the computer terminal operator.

(3) Rejection codes. See Table 27.10.

(c) Distribution

When lots are inspected and passed the inspector shall forward the MP

Form 410 and other applicable documents to the computer terminal operator on the day inspection is completed.

When lots are inspected and refused entry, the inspector shall immediately complete the following forms and send a copy of each to the computer terminal operator, U.S. Customs, and Foreign Programs Division:

1. MP 410
2. MP 63
3. MP 68
4. Health Certificate
5. Customs Form 4613 (if product is to be destroyed)
6. Customs Form 3499 (if product is to be converted to nonhuman use)

Table 27.10 - Rejection codes

Rejection cause	Code
Contamination (dirt, hair, feces, ingesta, etc.)	01
Processing defects (bones, bruises, clots, etc.)	02
Unsound condition	03
Pathological defects	05
Labeling defects	07
Composition/standard	09
VS requirements	10
Residues	11
Miscellaneous	12
Container condition (defects)	13

* 27.10 Passed Lots, Marking

* Containers, container, carcass, or
 * skinned part shall be
 * stamped with the "U.S. Inspected and
 * Passed" brand before completion
 * of inspection.
 * Containers of horsemeat shall have
 * the "horsemeat" in letters not
 * less than 1/2 inch high. The appropriate
 * brand described in
 * § 27.12 (a) of the MPI regulations
 * shall be stamped in green ink adjacent
 * to the marking.
 * Imported and passed imported product
 * is considered to be domestic product.
 * If it is later found to be suspicious
 * or unacceptable, it shall be retained
 * at the regional office contacted for
 * disposition instructions. Addition-
 * ally, such product located outside of
 * official establishments shall be re-
 * turned to the Compliance Division for
 * appropriate action.
 * Shipping may often result in certain
 * lots of unmarked product left over
 * from accepted lots. Such product is
 * usually given away to charitable
 * organizations or to importer's
 * employees. However, if requested, it
 * may be shipped to a local official
 * establishment for further processing
 * provided it is acceptably packaged and
 * properly identified as to contents and
 * country of origin. Product from lots
 * being held pending laboratory or
 * inspection results shall not be shipped
 * or given away until favorable results
 * are received.

* 27.21 DEFECTED SHIPMENT

* Marking shall be clearly
 * as "U.S. Refused Entry."
 * be done in such a manner as
 * that the identity of the
 * "U.S. Refused Entry" is
 * visible from any angle of
 * view. For example, if the product
 * is in a container or in combo-bins, the
 * "U.S. Refused Entry" placard shall be
 * on all four sides of the pallet.

* The regional office shall inform importers
 * of refused shipments shall be

disposed of within 45 calendar days of
 completion of inspection. In extreme
 situations, such as dock workers'
 strikes or vessel delays, the importer
 may submit a written request to the
 Administrator requesting an extension.
 Such request must specify reason for
 delay.

The owner of refused entry product
 shall not transfer legal title of such
 product. However, the title to product
 intended for export may be transferred
 to a foreign consignee, and the title
 to product intended for destruction for
 human food purposes may be transferred
 to end user, e.g., a pet food
 manufacturer or renderer.

(b) Shipping Under Seal

To be exported, product which has
 been refused entry at destination
 inspection locations shall be trans-
 ported to a port approved by the
 Agency under official seal; product
 refused entry at port inspection loca-
 tions must be exported from that port.
EXCEPTION! If exportation to a
 country willing to receive the refused
 entry product is not feasible from the
 port inspection location, the importer
 may submit a written request to the
 Regional Director for permission to
 transport the product under official
 seal to a port approved by the Agency.
 Such requests shall be accompanied by
 a completed Customs Form 7512 and con-
 tain the following information:

1. MP 410 number
2. Customs entry number
3. Originating country and establishment number
4. Number of containers and weight
5. Date and reason for refusal
6. U.S. port of destination
7. Consignee and destination country
8. Proof that export arrangements have been made

The original 45 day time limit is
 still applicable under this exception.
 The import inspection office must
 complete MP Form 408 and submit it with
 a copy of Customs Form 7512 to the port
 of export.

* (c) Notification *

* In all refused entry cases the MPI
 * inspector shall immediately notify the
 * following parties (directly or by
 * telephone) of the essential details of
 * the refused entry being reported:

- * 1. Circuit Supervisor
- * 2. Customs at the point of inspection
- * 3. Importer/broker
- * 4. Automated Import Information System (AIIS) Terminal Operator where the MP Form 410 was entered

* Foreign Programs Division (FPD) will
 * notify inspection officials in the
 * country of origin that product has been
 * found unacceptable.

* A Copy of Customs Form 7512,
 * indicating the name of the foreign
 * country to which the refused entry
 * product is consigned will be
 * immediately forwarded to FPD. FPD will
 * furnish information to the U.S. Embassy
 * in the receiving country for trans-
 * mittal to that government's health
 * officials.

* (d) Product Disposal *

* (1) Defective Portions. See
 * section 27.10. Defective or damaged
 * product may be removed from the lot and
 * refused entry without formal sampling
 * or presented as a separate lot for
 * formal sampling.

* (2) Direct Supervision. Inspectors
 * will directly supervise the destruction
 * or denaturing of refused product.
 * Transportation of refused product for
 * destruction, denaturing, or exportation
 * shall be accomplished under official
 * seal. If refused product is to be
 * exported, inspectors will directly
 * observe product being loaded aboard
 * vessel or carrier, and notate such
 * action on the MP Form 410 and, if
 * available, the Customs Form 7512.

* (3) Reimbursable Charges. Reimburs-
 * able charges for activities outlined
 * in (2) above occurring during the
 * inspectors' base time will not be
 * imposed as long as the supervision of
 * these activities does not interfere

with, or detract from, the inspector's *
 normal duties. When requested to *
 supervise the destruction, denaturing, *
 or exportation, of refused product, *
 inspectors shall first contact their *
 circuit supervisor for authorization, *
 and notify the requestor whether or not *
 the activity will be conducted on a *
 reimbursable fee basis. *

* (e) Animal Food *

* (1) Application. Refused entry pro- *
 duct shall not be used in the manufac- *
 ture of certified animal food. To *
 direct product to other animal food *
 channels with U.S. Customs and FDA *
 permission, the importers shall apply *
 in writing to the regional director *
 identifying cause of rejection, in- *
 tended destination, Consignee, and *
 date to be shipped (diverted). Such *
 product shall be used within 45 calen- *
 dar days after rejection. *

* (2) Denaturing. See procedures *
 outlined in Section 325.13 and 381.95 *
 of the meat and poultry inspection *
 regulations, and section 27.4(e) of the *
 manual. When refused entry product has *
 been destroyed or denatured, the *
 inspector supervising such action shall *
 contact the computer terminal operator *
 so that the Customs office at the *
 original port of entry may be notified *
 and the case file closed. *

* (f) Product Reconditioning *

* Inspectors shall not permit *
 reconditioning of refused product *
 unless authorized by the regional *
 office. Sorting or reconditioning of *
 refused product is a privilege. *
 Regional offices will grant the *
 privilege only once for any shipment, *
 and the sorting or reconditioning may *
 be accomplished only by competent *
 personnel under the inspector's *
 supervision. When the reconditioning *
 consists of relabeling, it shall be *
 conducted under identification service. *

* (g) Exportation *

* Refused entry product must be ex- *
 ported within 45 days after inspec- *

* Extensions may be granted by
* the Administrator or his designee.

* (1) Export Package. The importer/
* broker must complete and submit a
* Customs Form 7512 package for all
* refused entry product to be exported.
* The package must include two addi-
* tional copies of Customs Form 7512.
* One copy must be conspicuously marked
* "MPI Copy" and identified with a piece
* of red tape. The other copy must be
* labeled "Classification and Value
* Copy". The importer/broker must also
* provide a stamped envelope addressed
* to the appropriate computer terminal
* operator.

* The importer/broker must first submit
* the Customs Form 7512 package to the
* computer terminal operator where the
* MP 410 number is entered into MPI's
* computer system. The Terminal Operator
* will review the package for
* completeness. The package must
* include:

- * 1. MPI copy of 7512 as identified
* above.
- * 2. A stamped addressed envelope.
- * 3. The MP Form 410 number in the
* body of the 7512 and confirmation that
* the MP 410 was entered through their
* terminal.
- * 4. Classification and Value Copy as
* identified above.
- * 5. A photo copy of the 7512 for
* immediate transferral to Foreign
* Programs.

* (2) Certification of Export. If the
* package is in order the terminal
* operator shall:

* a. Stamp all copies of the Customs
* Form 7512 in red ink "Restricted
* Product," "U.S. Refused Entry," "No
* Subdivision or Diversion", and the
* Terminal Operator's office address
* stamp and actual calendar date by which
* product must be exported.

* b. Return the package to the
* importer/broker.

* The importer/broker must then submit
* the Custom Form 7512 package to the
* appropriate Customs office.

* At the time of loading the refused
* entry product for exportation, Customs

will mail the certified MPI copy of the
Custom Form 7512 in the preaddressed
envelope to the appropriate Terminal
Operator's office.

(h) Failure to Export or Destroy

Inspection Operations will notify
the Foreign Programs Division and
Compliance Division when refused entry
products have not been properly
disposed of.

Whenever the owner fails to have
refused entry product exported,
converted to animal food, or otherwise
destroyed within the fixed time period,
the Compliance Division will initiate
legal action to destroy the product for
human food purposes.

27.22 RETURN OF EXPORTED PRODUCT

(a) Regulatory Provisions

Sections 327.17 and 381.209 of the
MPI regulations provide that returned
U.S. exported product may enter the
United States upon approval of the
Administrator of the FSIS or the Deputy
Administrator of MPIO.

At the point of entry (POE) where
import inspectors are assigned, the
circuit supervisor will discuss the MPI
requirements for returned meat and
poultry products with U.S. Customs
officials assigned to the same POE. At
the POE where an import inspector is
not assigned, the area supervisor will
contact the local U.S. Customs
officials and discuss such require-
ments. Where possible, MPI will offer
U.S. Customs assistance; i.e., forms,
seals, etc., to secure shipments for
movement to locations where MPI per-
sonnel are assigned. MP Form 410
shall not be used for returned product.

(b) Shipment Examinations

Upon notification of a returned
shipment, MPI personnel shall examine
the product to determine if it has
become adulterated or misbranded during
transit. Adulterated or misbranded
product will be condemned, or if
possible, reconditioned under MPI
supervision at POE or an official

establishment. Product not eligible for free movement shall be transferred under official seal and MP Form 408.

(c) PPQ/VS Requirements

PPQ/VS clearance must be assured for each shipment before it may be allowed to move away from its POE.

(d) Compliance Division

Whenever the owner or representative of returned product disagrees with the MPI disposition made on product not in an official establishment, MPI Personnel shall request U.S. Customs officials to hold the shipment in question until further notified and will immediately contact the Compliance Division.

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